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UNIVERSITY OF ALBERTA

BUDGET ADMINISTRATION IN COLLEGES

by

THEODORE STEPHEN SADLOWSKI ©

A THESIS

SUMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

SPRING, 1993

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March 18, 1993

Dedicated

to

Barbara Sadlowski,

Jason Sadlowski,

Christine, Cameron and Christopher Newton, and

my late parents, Lena and John Sadlowski

ABSTRACT

There has always been public interest in education. Education, for the longest time, was seen as a public service that was essential to the development of society, industry and the enhancement of life in general. In more recent times, however, the nature of the public interest has changed. With changing economic and political conditions, the effectiveness and efficient operation of educational institutions has become an issue. The public is demanding assurances that the educational services which are provided are effective, and that the operation of the "schools" is conducted in an efficient manner.

In order to approach those issues, it is necessary to provide the public with the necessary information that will demonstrate the effectiveness and efficiency of the systems. Part of that necessary information is financial. Prior to the closer public scrutiny of education, little emphasis was placed on budget administration in education. As a result, there is now a lack of confidence in the information that is provided.

This study was designed to address, through description and comparison, the budget administration practices which include accounting, reporting and budgeting, in three public post-secondary institutions in the Province of Alberta. The study followed principles of qualitative research and utilized the data collection techniques of document review, observation, and interviewing in order to gather the data which were necessary to describe the budget administration practices at the colleges, and to assess the issue of trustworthiness of the financial information that is provided by colleges.

The results of the study showed that the lack of confidence in the information which had been provided was in large part justified. There was some lack of consistency in budget administration practices and this did result in information which was not consistent among institutions, nor was it necessarily consistent within an institution over a period of time. Financial personnel at the colleges which were studied indicated this, but they also indicated that attempts were being made to alleviate the problems. Greater interest in public sector financial administration was being shown by the Canadian Institute of Chartered Accountants (CICA), the Canadian Association of University and College Business Officers, and the Auditor General, and a greater degree of cooperation by college business officers have all contributed to the establishment of more consistent budget administration practices for colleges.

Although the situation is improving, the work is not yet complete. More efforts will be required in the future to be able to ensure, with confidence, that educational enterprises are effective and operate efficiently.

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Chapter 1

AN INTRODUCTORY STATEMENT OF THE PROBLEM

1.1 Introduction

The early 1960's, according to Scribner and Englert (1977), brought about a number of changes in the way that society viewed education. One change resulted from the emergence of the issue of financial accountability. With public sector expenditures increasing rapidly, educational institutions and other social agencies were required to provide more justification for their expenditures. Two related issues, namely effectiveness and efficiency of programs and organizations also began to emerge. At one time the effectiveness and efficiency of educational organizations were by and large taken for granted. Now these organizations were being asked to demonstrate that their operations were indeed effective and efficient. It is for these reasons that concepts like program budgeting and zero-based budgeting emerged.

The trends of the 1960's continued into the 1980's. With the occurrence of an economic recession and generally less purchasing power available to public sector organizations, education was having to continue to compete with other social programs for the limited funding which was available. In order to be able to assess the accountability, efficiency and effectiveness of social programs including education, financial and other information about organizational operations is required. One source of that information, particularly the financial information, is the organization's budget administration or accounting systems (Garms, Guthrie and Pierce, 1978). The focus of the research presented in this dissertation is on accounting, budgeting, and reporting systems. Selected non-university post-secondary educational institutions in the Province of Alberta provided the data for the study.

1.2 Statement of the Problem

This study was designed to investigate the variability in the accounting practices which were used in selected non-university public colleges in Alberta, and to assess the impact of the accounting practices on budgeting and the comparability of reports which were prepared by those institutions.

More specifically, the purpose of the study was to address the following objectives in relation to each institution:

1. To describe the structure of the accounting system at each institution and the accounting procedures which were used (Hendriksen, 1977).

2. To determine the basic postulates, objectives and standards of the accounting practices (Hendriksen, 1977).

3. To describe the budgeting and reporting systems at each institution (Herbert, Killough and Steiss, 1984).

4. To compare the accounting practices that were used at the institutions which were studied and to identify any common practices and any divergent practices.

5. To determine what relationships existed between the accounting system and the budgeting system (Herbert, Killough and Steiss, 1984).

6. To determine what relationships existed between the institution's accounting system and its reporting practices.

Attaining the above objectives resulted in a description of the accounting, budgeting and reporting practices for each non-university post-secondary institution which was studied. The findings were then compared and contrasted. As a result of that process, conclusions about the similarities and differences among the accounting, budgeting and reporting practices were identified, and conclusions about the relationship among these three systems were drawn.

1.3 Significance of the Study

With changes in both the political and economic environments (Scribner and Englert, 1977) within which education operated, educational institutions had to begin addressing a number of concerns dealing with accountability and the stewardship of public funds. There was growing pressure on educational institutions and other governmental organizations to become more concerned about the economy, efficiency and effectiveness of the programs which they provided to the public (Beedle, 1981). Focus on the public sector was beginning to mount and greater accountability was expected by the public. In order to address those issues, organizations require accounting information systems that can provide the necessary and relevant financial information on a timely basis.

The literature indicated that there are users of financial information who are internal to the organization as well as those who are external to the organization. These users need relevant information for the purposes stated above. Beedle (1981:51) listed a number of such users, namely: creditors, suppliers, contributors (senior levels of government), and constituents. These groups used the financial information for decision-making in relation to the reporting organization.

An interesting problem emerges, however. What is the state of accounting in the governmental and nonprofit sector? What impact might these accounting practices have on the budgets of the organizations and the reports which are generated by them?

1.3.1 Accounting in Nonprofit Organizations

Beedle (1981), indicated that in Canada the major source of generally accepted accounting principles (GAAP) was the Canadian Institute of Chartered Accountants (CICA) Handbook. The CICA Handbook addressed the GAAP for commercial profit-oriented organizations, but it did not directly address GAAP for nonprofit organizations. Beedle (1981) further indicated that there was no one document which delineated appropriate accounting practices for the nonprofit sector. Rather, there were a number of sources, examples of which were: Municipal Finance Reporting Manual, Principles and Recommendations from the Intergovernmental Conference, National Council on Government Accounting Statements (United States), the CICA Handbook, the Public Sector Accounting and Auditing Committee of the CICA, and the Canadian Association of University Business Officers Handbook.

Much of the literature indicated that the accounting systems for nonprofit organizations should be based on the fund accounting model. There is, however, a good deal of variability in the accounting units or entities that may be established in a fund accounting system. As Hay and Engstrom (1987:8) pointed out, "Organizations must maintain those funds required by law and the principles of sound financial administration." Given the variability that may exist in the structure of the accounting systems, there may also be a good deal of variability in the principles and practices which govern accounting, budgeting and reporting, and therefore resulting in a lack of consistent practice.

Denham (1974) identified the need for full accountability in the governmental sector when he wrote about the role of Canadian Auditors-General. Program audits which assess value-for-money and the effectiveness of programs are, according to Denham (1974), a role of auditors-general. The implication of that statement is that since many educational organizations are subject to audit by an Auditor General, it is possible that in future the effectiveness and efficiency of such organizations may be assessed by parties external to that organization, and perhaps according to external standards. The task would be easier and more meaningful if there were generally accepted accounting standards for post-secondary schools. It is for this reason that it is important to determine if common objectives and standards for accounting in educational institutions existed. If they did not, what impact may that have on the budgeting and reporting done by those organizations? Also, what impact might program audits have on organizations which lack common objectives and standards?

Detmold (1981) classifies government services into three categories. Education was placed in the "marketable services" category and according to Detmold (1981) this category lends itself to performance criteria comparable to those used in business. The reason for this conclusion was that the concept of revenue dependency can be applied. Application of that concept could lead to education being assessed on criteria used in the commercial sector. Such criteria, however, may not be appropriate for educational organizations, but if they are the only standards which exist, they may well be used.

Golz (1984) wrote about fixed asset accounting in the field of education. Fixed assets owned by educational institutions are generally not depreciated (CICA, 1980), and as a result there was no indication of their reduced service potential over time. The cost of replacement was rarely planned for and replacement was generally financed on a pay-as-you-go basis. The reason for this in large part was the lack of relevant information. According to Golz, there was a need to review the principles of fixed asset accounting which were used by educational organizations, and furthermore, it was necessary to establish principles that would result in more relevant and useful information which could be used in capital budgeting and decision-making.

Rogers (1983) discussed the role of comptrollers in federal government organizations. Comptrollers, due to the knowledge that they possess about the availability of funds, can exercise tremendous authority over organizational, as well as, operational plans within programs. According to Rogers (1983), financial experts and comptrollers should have no authority nor line responsibility in program delivery. Their responsibility should be advisory in nature and they should ensure that line managers have accounting information of appropriate quality that would enable them to carry out the operation of their programs effectively and efficiently. In order to meet that end, the financial information needs of the managers must be fully understood and the accounting and other financial systems must be established with the objective of meeting those needs.

Rossmiller (1987) identified a number of areas in which school administrators should have some training. Among these were: accounting, budgeting, cost-benefit analysis, and cost-effectiveness analysis. Rossmiller (1987) seemed to indicate that administrators should possess skills in these areas to assist them in assessing and achieving equity in school finance. The mention of these important skills in the finance area seemed to indicate concurrence with Steele (1983), about the need for relevant accounting information in the nonprofit sector.

Wojdak (1969), writing over twenty years ago, identified an important difference between governmental and commercial accounting. The accounting entity for the commercial enterprise is the business firm. In the public sector, the accounting entity is the fund. This implied that within one public organization there could be a number of accounting entities. This could make the accounting process in the public sector more complex than that in a commercial enterprise. This complexity suggested the need for well established objectives, principles, standards, and procedures for accounting and other financial practices in nonprofit organizations.

Steele (1983) advocated that the public sector should search for or develop measures of productivity which could act as proxies for the net income figure which was used by commercial enterprises. The public sector has not done this because many people in that sector have felt that measuring productivity in a sector whose output is not well defined is a futile exercise. Furthermore, there was a generally held belief that productivity can only be measured absolutely and should not be subject to judgement. Steele (1983), however, advocated that standards could be established by considering historical data, and from these, productivity indices could evolve. Accounting information provided in a useful format could be significant in the development of both standards and productivity indices. Such indices could also be helpful in the design of measures of accountability.

With the continuing need for accountability in education, as well as the uncertain economy, educational organizations will likely be forced to continue to assess the effectiveness and efficiency of their operations. Since specific accounting objectives, principles, standards, and procedures for such organizations appear not to be well defined at present (Beedle, 1981), external principles may be imposed on those organizations, as was suggested by several writers who have been mentioned earlier. Callahan (1962) described the effects on the American education system when principles used in industry were applied to education. The results, according to Callahan (1962), were neither constructive nor positive. An identification of specific principles currently used by educational organizations as well as possible further development of such principles may help to prevent the recurrence of such situations, and at the same time can address the concerns surrounding accountability and stewardship which are facing post-secondary institutions.

1.4 Post-Secondary Institutions in Alberta

The Province of Alberta has a variety of post-secondary educational institutions. This study focuses on a subset of the entire set. In this section, an attempt will be made to provide a brief description of the types of institutions which exist, and particular attention will be given to the types of institutions which were the subject of this study.

There are four universities operating in Alberta. These institutions offer undergraduate degree programs and, to a varying extent, programs at the masters and doctoral levels. In addition, some of the universities, and again to varying extents, are involved in professional in-service education and training that is available on a full-time or part-time basis. Also, some may be involved in shorter term training in response to particular community needs.

The universities are autonomous bodies governed by boards of governors. Members of these boards are appointed to fixed terms by the Minister of Advanced Education. The Minister, through the Department of Advanced Education, establishes parameters within which the boards operate the institutions. The source of funds for the universities are grants from the government, fees for instruction, cost recoveries, fund development activities and payment for specific services rendered, to mention a few. The Universities Act serves as the legislative base for the establishment and operation of the universities.

A second type of post-secondary institution is what is often generally termed the two-year institutions. One main thrust of these schools is to offer two-year diploma and one-year certificate programs, but some are also involved in university transfer programs.

Within the two-year institution categories are three subtypes. There are two technical institutes, three agricultural colleges, seven community colleges, and one specialized college. The Technical Institutes Act serves as the legislative base for the two technical institutes. The Colleges Act is the legislative base for all the other two-year colleges.

Each of the two-year institutions is governed by a board of governors. Like their university counterparts, the members of the college and technical institutes boards of governors are appointed by the Minister of Advanced Education and they operate their institutions within parameters established by the Department of Advanced Education.

A third type of public institution at the post-secondary level in Alberta is the Alberta Vocational Colleges. These institutions are involved primarily in academic upgrading for adults, English As A Second Language education, and they also offer a variety of short-skill training programs of less than one year in duration. Unlike the universities and the two-year institutions, the Alberta Vocational Colleges, (AVC's) are not governed by boards of governors. Rather, they are termed provincially-administered institutions. They are administered directly by the Department of Advanced Education. The Presidents of the AVC's currently report directly to the Deputy Minister of Advanced Education. The legislative base for the AVC's is the Department of Advanced Education Act and the Provincially Administered Institution Regulation which is derived from the Act. The accounting and financial systems employed at these institutions are typically those found in any government branch or division. This is unlike the board-governed institutions which exist as entities outside of government and, as a result, maintain accounting and financial systems that are designed to meet their unique needs.

The focus of this particular study was on a sample of the two-year institutions which are collectively called colleges. As described above, there are a number of types of these institutions ranging from the technical institutions and agricultural colleges to community colleges that have a relatively broad and varied programming base. They are all quasiautonomous in nature and could have different mandates and missions.

1.5 Delimitations of the Study

This study is delimited to non-university post-secondary educational institutions in the Province of Alberta. Alberta has a number of privately owned institutions in the above described sector as well. Those were not be included in the study. The focus, therefore, is on public institutions that are creations of the Government of Alberta. The Alberta Vocational Colleges were also excluded from the study. In summary, then, the study includes only the non-university post-secondary institutions that are public and board governed.

The study is further confined by the sources of information. There were three sources:

1. documentary sources such as policy and procedure handbooks were available at the institution;
2. information provided during interviews with selected officers of the institutions, and

3. observations of the procedures used to account for specific transactions.

In addition, interviews were held with finance personnel only. No users or user groups outside the finance divisions were interviewed and no information from them was sought.

In summary, the purpose of this study was to determine the basic underlying assumptions of the accounting system at each of the institutions and as well to determine the objectives, principles and procedures that governed the practice of accounting. Further, the structure of the accounting systems was determined. The budgeting and reporting systems were also described, and the relationship to and the impact upon these systems by the accounting system were assessed.

This study was not concerned with actual figures which appeared in accounts and in the reports that were generated. Specific figures were of no concern to the present study.

1.6 Limitations of the Study

As with other studies such as this, there are a number of limitations to the current study. One such limitation is that the findings are applicable only to the institutions which were studied. Further study would be necessary to verify the generalizability of the findings to other institutions. The institutions selected may have different mandates and operational missions and may be at different stages of development.

This could have had an impact on the financial systems in place and the expectations that were placed on those systems.

A second limitation was the result of the small sample of respondents which was used in the study. Of the thirteen possible non-university post-secondary public educational institutions, only three were selected. The reason for this was the comparative nature of the case study approach which was utilized and the tremendous amount of time which was required at each institution.

A third, but related limitation is that only finance personnel were used as information sources in the study. As a result, all conclusions were from a financial perspective and not from a total organizational or user perspective. Also, the views of information users who were external to the organization were not expressed, except those of the provincial auditor-general which were part of each college's annual report.

1.7 Definitions

1. Accounting Objectives - statements outlining the purpose to be served by the accounting process.

2. Accounting Principles - standard rules for accounting action that are necessary to achieve fair and effective communication through the medium of financial statements. (Skinner, 1972.).

3. Profit-Oriented Organization - organizations in which there is a transferable ownership interest and from which members and contributors can receive economic gain (Skinner, 1972).

4. Nonprofit Organization - an organization in which there is no transferable ownership interest and from which members and contributors do not receive any economic gain (Skinner, 1972).

5. Effectiveness - the term implies the attainment of predefined objectives.

6. Efficiency - the amount of output per unit of input (Anthony and Dearden, 1976).

7. Fund - a fiscal and accounting entity with a self-balancing set of accounts that record assets, liabilities and residual values and which are segregated for the purpose of carrying out specific activities or attaining specific goals (Woelfel, 1987).

8. Encumbrance - expected liabilities which will occur when purchase orders are issued but not filled.

9. Accounting Entity - an accounting entity in the nonprofit sector is a fund (Wojdak, 1969).

10. Budget Administration - this refers to accounting systems in the broad sense and includes budgeting and reporting (Garms, Guthrie, and Pierce, 1978.)

1.8 Organization of the Study

This study has seven chapters, including this introductory chapter. Chapter two provides a review of the literature relating to accounting and other aspects of financial management in the nonprofit sector generally and the post-secondary educational sector, specifically. Included in this chapter is a description of the fund accounting model. In

Chapter three, the problem addressed by this study is reviewed in greater detail and the methodology employed in the study is described. Chapter four provides a description of the accounting, budgeting and reporting practices at each of the institutions selected for the study. Included in the description are the underlying assumptions, objectives, standards and procedures utilized within the financial management systems. Chapter five highlights the similarities and differences that exist in the current accounting practices among the institutions studied. Chapter six highlights the relationship between the accounting practices and the budgeting and reporting practices. Particular emphasis is placed on the impact that variability in accounting practices has on budgeting and reporting. The last chapter, Chapter seven, contains a summary of the findings as well as the conclusions reached. Also presented are the implications of the study for practice, theory building and for further research.

Chapter 2

REVIEW OF LITERATURE

2.1 Introduction

In recent years the need for sound financial management in nonprofit organizations has come to the forefront. In accordance with Skinner's (1972) definition, most public colleges and universities are included in the category of nonprofit organizations. The activities of budgeting, accounting, and reporting in nonprofit organizations have received greater attention as a result of the need for greater accountability. In general, economic declines have left governments with fewer financial resources to allocate to post-secondary education and other governmentally supported activities, such as education, health services and social services. Also, increases in various types of taxes have caused members of the general public to question the accountability, effectiveness and economy of various public programs, including those aspects relating to the entire post-secondary education sector.

In order that post-secondary educational institutions can respond to the questions and inquiries coming from governments and the general public, they require information of a financial nature, relating to their budgeting or fiscal planning, accounting and reporting. There are users of such information who are external to the organization as well as those who are internal to the organization. In addition, management, faculty, and support staff all have fewer resources with which to work and this tends to make the resource allocation process more difficult to handle. In order that these internal groups are able to carry out their tasks, their needs must be met.

The purpose of this chapter is to review, from a literature standpoint, the three major processes of financial management, namely: accounting, budgeting and reporting. It was the intent to explore the purpose of each of the processes, the formal structure of each process, as well as any basic underlying assumptions and objectives which may be identified in the literature. In addition, it was intended that the specific principles and procedures for each activity be explored and explained.

2.2 Accounting Function

2.2.1 Users of Accounting Information

Gordon and Shillinglaw (1974), indicated that the main purpose of accounting is to provide useful information about the economic affairs of an organization to two groups of users. These are the organization's management, as well as other internal users, and users who are external to the organization. Beedle (1981), provided a listing of possible external users. Included in the list were creditors, suppliers, contributors, such as senior levels of government, and constituents or users of the service provided by the organization. In the case of post-secondary institutions, this includes prospective students and their parents.

2.2.2 The Purpose of Accounting

Pope and Tikkanen (1984) wrote more specifically about accounting and school management. They identified six purposes served by the accounting function. The following were the purposes which were listed:

1. to maintain a record of the business transactions of the school district;
2. to provide the necessary basic information for planning and decision making at both the administrative and policy levels;
3. to provide the basis for a control system to ensure propriety in the expenditures of organizational resources;
4. to provide the basis for decision making in the budgeting process and in resource allocation;
5. to provide the information required for reporting purposes; and
6. to provide information to resource providers about the resources which are required to maintain certain levels of service.

Hay and Engstrom (1987) also looked at the purposes served by an organization's accounting information system. They identified three purposes: decision-making, demonstrating appropriate accountability and stewardship, and evaluating managerial and organizational performance.

The need to demonstrate appropriate accountability by public sector organizations was recognized earlier by Cutt (1982). Cutt contended that there were two levels of accountability that nonprofit organizations should address. The first level, procedural accountability, dealt with the assurance that the resources which were allocated to organizations and programs were used and accounted for in a manner that was intended. The second level, consequential accountability, dealt with the actual results attained as a result of the expenditure of those resources and not just mere propriety.

Current financial reporting practices in the nonprofit sector tend to strive toward procedural accountability only. This, according to Cutt (1982), is caused in large part by the lack of measurable outputs and the lack of a "bottom line" measure comparable to the net income figure which is used in the commercial enterprises. Without a "bottom line", the worthwhileness of the services provided by many nonprofit organizations can be difficult to assess.

Beedle (1981) prepared a research monograph dealing with accounting by local governments in Canada. Although he did not specifically address accounting for post-secondary institutions, he did identify a number of basic purposes that accounting and reporting can fulfill. The particular user needs which he addressed were the following:

1. the need to demonstrate fiscal compliance with legal mandates and other prescriptions (stewardship);
2. the need to demonstrate the financial viability of the organization;
3. the need to provide indicators of management performance, for example, the economy, efficiency and effectiveness in goal achievement;

4. the need to demonstrate the maintenance of generational equity; and
5. the need to indicate the overall cost of services provided.

Dykstra (1988) also focused some attention on the purpose of accounting. According to Dykstra, the major purpose of accounting was to enhance internal control and to provide related information for financial reporting. The major areas requiring control were assets, such as cash, inventory and property, as well as personnel. In a sense, Dykstra sees the main purpose of accounting as being able to ensure that procedural accountability was demonstrated.

The Association of Universities and Colleges of Canada also identified a number of purposes of financial accounting information. Included in the list of needs which must be met were:

1. the evaluation of the use of resources in the achievement of objectives and goals;
2. information about the overall cost of programs and services;
3. to demonstrate the ability to continue to provide programs and services and to meet obligations; and
4. to demonstrate the accountability and stewardship of the organization.

It is noteworthy that there were a number of common themes in the literature dealing with the purpose of the accounting function within an organization. Whether the literature deals with the nonprofit sector in general or whether it is more specific and deals with post-secondary institutions, a basic need which was identified was that of demonstrating accountability. The cost of services and programs was another need which was recognized, as was the demonstration of financial viability of the organization.

In order that these purposes and the user needs identified above can be met, it is necessary that the organization's accounting system be established with those purposes and needs in mind. To do so requires careful planning, analyzing and summarizing of needs to ensure that the needs of all interested users are balanced (Skinner, 1972). That is, the information which is provided to users must be useful. In establishing an accounting system, it is necessary therefore, to determine who the information users are, and what their particular needs are. It is noteworthy that the users can represent a range of stakeholders with a variety of needs. It is for this reason that Skinner (1972) discussed the necessity to balance the user needs.

2.2.3 Accounting Postulates

Accounting theory as defined by Hendriksen (1977:1), is a "set of broad principles which are derived by logical reasoning." The purpose of accounting theory is twofold:

1. to serve as a framework against which accounting practice can be evaluated; and
2. to serve as a guide for developing new procedures to be used in practice.

In considering the development of accounting theory, one of the first issues which requires addressing, according to Hendriksen (1977:106), is a statement of the basic postulates or assumptions about the nature of the accounting entity and the environment in which it operates. The validity of the postulates often influences the effectiveness of the accounting and reporting practices.

Davidson, Stickney and Weil (1985) concurred with Hendriksen (1977) about the significance of identifying and defining the accounting entity. According to these writers the starting point in designing an accounting system and accompanying reporting system is the identification of the accounting entity. As was indicated earlier in this document, a major difference between the nonprofit organization and the commercial enterprise is the accounting entity. The business firm is the accounting entity for a commercial enterprise, while the fund is considered the accounting entity for the nonprofit organization (Wojdak, 1969). In any one nonprofit organization therefore, it is possible to have a number of different entities which must be accounted for independently. Because of the nature of some of the entities and the legal restrictions which may apply to them, it is necessary, for compliance purposes, that all such entities and their accompanying restrictions be identified and be addressed by the accounting system. According to Hendriksen (1977), identifying the nature of the entity is also helpful in deciding what should be included in the financial reports which are prepared and the best way of presenting information about the entity.

Along with identifying the accounting entity, it is necessary to assess an important characteristic about that entity, that being the entity's continuity (Hendriksen, 1977:112). This characteristic relates to the life-span of the entity and is related to the "going concern" concept which is often applied to commercial enterprises. If the life expectancy of the entity is indefinite as opposed to being limited or short-term, the accounting system should reflect the longer term needs which will have to be met, such as "What information is needed and how long should it be retained?" The continuity concept will also have an impact on operational activities, such as the acquisition of long-term assets and/or planning for such activities in relation to the entity and the purpose which it is designed to fulfil.

Another set of postulates which are of significance are the ones dealing with the environment in which the accounting entity operates. Generally these postulates tend to deal with political, social and economic aspects of the environment. Care must be taken when identifying these so as to ensure that only those aspects of the environment which are relevant to the accounting entity are taken into consideration. For example, in establishing an accounting system today, it is necessary to be aware and give consideration to the social climate created by society's greater need for accountability. Being aware of court cases such as Serrano vs. Priest (Benson, 1978), in the State of

California and their impact on educational finance are also of critical importance because they could affect the nature of the information which users may require.

In addition, the political climate is a matter for consideration in setting up accounting systems. Scribner and Englert (1977) identified three factors which resulted in the politicization of education. These factors are:

1. the willingness of the courts to rule on matters relating to education;
2. a growing criticism of the lack of effectiveness in education; and
3. the challenging of professionalism in education caused, in large part, by a general teachers' strike in New York in 1960.

All the above factors resulted in education being moved into the political arena and expenditures in education becoming more closely scrutinized. With that closer monitoring, more attention must be paid to the usefulness of the information generated by the accounting system as well as the quality and characteristics of that information.

Another environmental postulate deserving mention is the economic climate. This factor is closely related to the greater political scrutiny of education which was discussed in the previous paragraph. Taxpayers, citizens in general, and users of services provided by educational institutions no longer hesitate to criticize the economy, efficiency and effectiveness of education. During a time of economic downturn funding agencies normally suffer from a lack of resources and educational organizations may, as a result, suffer cuts in their funding levels. This decade has seen that happen in this province. With fewer funds available for public programs, and governments being cautious not to increase taxes, educational organizations were expected to provide services at previous levels but at lower cost. To do so required an accounting system capable of generating useful and timely information to enhance resource allocation, management and operational control.

In conclusion, both Hendriksen (1977) and Davidson et al (1985), indicated that one of the main requirements in the establishment of an accounting system is that basic assumptions about the entity be clarified. These assumptions should relate to the nature of the accounting entity itself, and the environment in which it operates. Two cautionary notes are necessary regarding the postulates. First, in establishing the postulates, care must be taken to address only the ones which are relevant to the accounting process. Second, once the postulates are developed, it is important to remember that environmental factors may change over time. If the accounting system is to be sensitive to the user needs, it is necessary to be aware of the changes in the environment and the implication which those changes may have for organizations and users of information.

2.2.4 The Objectives and Principles of Accounting

The ultimate objective of accounting is to ensure that relevant information can be conveyed to the user (Skinner, 1972). Implicit in the foregoing statement is the need to identify who the users of the information are and what their information needs are. As was indicated earlier in this chapter, the users of accounting information are many and varied. The task therefore, of "conveying relevant information to the users," is not an easy one. If the needs of each of the various user groups are different, which of the following two courses of action would be most appropriate? Should the accounting system be able to generate various types of information, each type being tailored to needs of a particular group, or should the system generate one basic type of information and the various users be required to extract the information pertinent to their specific needs? Generally the approach taken has been to provide two basic types of information; one for internal users and one for external users. In the commercial sector a third type is often generated, that being the information required to satisfy the specific needs of taxation authorities. Post-secondary institutions in Alberta must provide information to the Department of Advanced Education which is often more specific than that provided to other external users. In that sense, colleges also generate three types of information.

Henke (1985) identified two basic objectives for nonprofit organization accounting. They are:

1. to facilitate management control by providing the information required to assess efficiency, effectiveness and economy of resource use and operations; and
2. to demonstrate accountability by permitting officials of public organizations to report to the public on the result of their organization's operations and its use of public funds.

Gordon and Shillinglaw (1974) identified seven principles for accounting. They are: relevance, verifiability, objectivity, consistency, comparability, materiality and disclosure. In other words, if accounting information is to be useful, it must meet each of the objectives. We will look at each of the objectives in turn.

The term relevant implies that the information is usefully associated with certain actions or results (Hendriksen, 1977). Three types of relevance can be looked at, namely, decision relevance, goal relevance, and semantic relevance. Decision relevance pertains to information that relates to a particular decision at hand. Goal relevance relates to information that influences the achievement of a particular goal. Semantic relevance implies the understandability of the information by users.

The second principle is verifiability and it implies that the information must be reliable. In other words, it should be possible to take some accounting information and verify its accuracy. The use of historical cost in accounting has persisted because of the fact that source documents can be traced and the information in accounts can be verified. A related principle is that of objectivity of the information. This concept has various meanings in the literature; however, Hendriksen (1977) provides one definition that indicates that information is objective if it can be replicated.

The consistency principle implies two basic qualities. First, consistency requires that an accounting entity use the same procedures from period to period. Second, it requires that the same procedures be used by different entities to account for the same events.

The principle of comparability implies that the information has sufficient common qualities to enable a user to make interperiod comparisons for an entity as well as interentity comparisons for similar entities.

Materiality implies a specific significance to the information. Information is considered to be material if it has an impact or could have an impact on the decisions which are made by a user. The disclosure objective is related to materiality. The disclosure objective pertains to the amount of information which should be provided to the users. Hendriksen (1977) indicates that material information should be disclosed. Conversely, information which in not material need not be disclosed.

Pope and Tikkanen (1984) also identified a number of objectives which should be considered when establishing an accounting system. In addition to the list provided by Gordon and Shillinglaw (1974), Pope and

Tikkanen (1984) identified conservatism as a principle that should be established. Because of the uncertain environment in which organizations operate, many people believe that it is necessary to provide a pessimistic rather than optimistic picture of the financial affairs of the organization. That view is the essence of conservatism. This objective results in recognition of revenues as late as possible and recognizing of expenses as early as possible.

Hendriksen (1977) was critical of conservatism as a principle because there are no standards by which to implement it and as a result, it could have a detrimental effect on comparability. In addition, investments are often valued at the lowest possible value. Such activities could have a tremendous impact on the information which is generated.

Skinner (1972) identified three major principles that should be met by the accounting system. These three objectives are reliability, communicability and practicality. Reliability of information implies that users can depend on the information which has been provided to them. In order for information to be reliable, it must be verifiable. Information is verifiable according to Skinner (1972), if two or more qualified persons can attest to its accuracy.

The communicability of information is measured by five attributes. These five attributes are: freedom from bias, quantifiability, disclosure, simplicity and timeliness. Freedom from bias means that the information has been verified independently. Quantifiable information means that it is expressed in numeric terms. This characteristic seems to be closely related to the "verifiability" objective. The disclosure characteristic makes a provision of qualitative data to underscore or highlight the quantitative data.

The final two attributes are extremely important as well. The information must be as simple as possible so as to enhance its understandability for the user. This characteristic seems closely related to semantic relevance. Finally, the information must be generated according to a timely schedule. Information that is outdated is hardly useful to the user for any purpose.

The final objective identified by Skinner (1972), is that of practicality. The implication of this objective is that there should be a positive cost/benefit resulting from the information. This objective seems to relate to two previously stated objectives, namely relevance and perhaps materiality.

The effectiveness of an accounting system is related to the objectives that are established for the system. Without objectives it would not be possible to ascertain whether an accounting system is effective. It should be noted that many of the accounting objectives also pertain to reporting. The reason is that the distinction between accounting and reporting is often quite fine. The purpose of accounting is to provide useful information to users. The vehicle through which this information is provided is the reports. Beedle (1981:69), made the point well when he states that accounting needs to be distinguished from accounting reports. The reason is that any given report is relevant only to a limited number of users. The literature on reporting often tends to emphasize the needs of external users only. The accounting system, however, has a broader purpose than merely meeting the needs of external users. Attention must also be given to the needs of internal users. Examples of internal user needs are control of resources, facilitating decision making, and making choices from alternatives. According to Beedle (1981), therefore, accounting and reporting may have some common objectives but because of the different scope of the two systems, their objectives should be looked at independently.

2.2.5 The Structure of the Accounting System

In establishing an accounting system, various decisions must be made regarding the structure of the system itself. In a publication by the National Association of College and University Business Officers (1985), three basic structures for an accounting system that deals with operational activities were identified. The system could be designed to reflect and measure activities by function. Examples of functional categories for post-secondary organizations may be instruction, academic support, and student support. Another commonly used structure is called organizational. Examples of the use of the organizational structure may be accounting by department, program, and by administration. The third common structure is termed the object of expenditure. Commonly identified objects of expenditure are manpower, supplies and services, and capital. Depending on organizational and other needs, the accounting system can reflect one or more of the above mentioned structures.

The second major aspect with regard to the structure of accounting systems relates to the accounting model which is most appropriate for the nonprofit sectors.

Much of the literature dealing with accounting in nonprofit organizations indicates that the fund accounting model is the most appropriate for those types of organizations. That is, the accounting system is a series of funds. A fund according to Lynn and Freeman (1983) is a fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources and all related liabilities, and residual balances and changes. A fund is segregated to allow for carrying on specific activities or attaining certain objectives.

A number of critical questions arise regarding the number and type of funds which can be required. In other words, how many funds should be used and what type should they be for a particular organization? Herbert, Killough, and Steiss (1984) also indicated that the fund accounting model is most appropriate for nonprofit organizations, and they suggested three fund types. They are: governmental funds, proprietary funds, and fiduciary funds. Within each fund type are specific funds.

The governmental fund type includes the following funds:

1. General Funds: to account for all resources except those which are specifically mandated.

2. Special Revenue Fund: to account for revenue from specific sources and whose expenditure is restricted to particular purposes.
3. Capital Projects Fund: to account for resources to be used generally for the construction, acquisition or major renovation of capital facilities.
4. Debt Service Fund: to account for the resources gathered to pay off long-term debt, including both principal and interest.
5. Special Assessment Fund: to account for resources that are acquired under a special mandate. This would pertain more to school districts which may acquire resources through supplementary requisitions.

The proprietary fund type includes two funds. These are:

1. Enterprise Fund: to account for operations within an organization which are expected to operate on a cost-recovery basis and, further, which are expected to carry out their own management control and be accountable to the parent organization. Examples of such enterprise may be bookstores, cafeterias, and residences in colleges.
2. Internal Service Funds: to account for all transfer revenues which occur when one unit within an organization acquires goods and/or services from another unit for a price.

The third fund type is the fiduciary funds. These are funds which are kept in trust for individuals or other organizations and which are governed by mutual agreements and restrictions. A typical example of this fund type would be the fund in which moneys held on behalf of others are accounted for.

The CICA (1981), in its study of financial reporting for nonprofit organizations also identified a number of fund types which could be used. Among the funds which were identified in that study are:

1. Current Operating Fund: to account for all unrestricted revenues and the day-to-day operating expenditures. This is similar to the general fund described earlier.

2. Current Restricted Fund: to account for revenues that can be expended only on specified items which are identified in the restrictions.

3. Endowment Funds: to account for assets donated to an organization, the income from which must be expended in a particular manner as specified by the donor and could include capital acquisition or operating expenses.

4. Board Designated Funds: to account for resources set aside by a board. This fund is similar to an endowment fund, except that here the board has access to both principal and interest and it is the board which establishes the restrictions.

5. Plant Fund: to account for fixed assets such as land, buildings, equipment, and furniture.

6. Custodial Funds: to account for funds held in trust for other individuals or organizations.

Henke (1985) dealt specifically with accounting for colleges and universities. He identified six main fund types. They are:

1. Current Funds: to account for resources available for current spending purposes, restricted and unrestricted, as well as, for ancillary enterprises such as bookstores and cafeterias. This is similar to the general fund in governmental fund type.

2. Loan Funds: to account for resources that may be loaned to students and staff. This fund is often operated on a self-sustaining basis.

3. Endowment Funds: to account for resources which are provided by donors and only the interest earned from the resources may be used for specified purposes. Due to possible differences in restrictions, each endowment must be accounted for separately. It should be noted that there are

various types of endowment funds such as pure endowments, term endowments, and board-designated endowments.

4. Annuity and Life Income Funds: to account for resources which are contributed by a donor. In this sense they are like endowment funds. After a specified period often the principal becomes the property of the institution.
5. Plant Funds: to account for fixed assets and long term debt. These funds include resources designated for the acquisition of plant assets.
6. Agency Funds: to account for resources which are held by the institution but not owned by the institution.

As indicated by the above examples, the literature tends to support the notion that the structure of an accounting system for a nonprofit organization should be based on the fund accounting model. Since post-secondary educational institutions are nonprofit organizations, the same conclusions seem to hold. The view is supported by Henke (1985), Lynn and Freeman (1983), CICA Research Study (1981), Scheps and Davidson (1978), Gross (1974), Skinner (1972), and Woelfel (1987). Most of the writers on the subject provided a number of fund categories that can be used by a college or university. Others become more specific and suggest subcategories for certain types like Gross (1974) when discussing plant funds. Many discuss similar funds but use different titles to identify the funds.

Pope and Tikkanen (1984) also recommended the fund basis of accounting for educational organizations. They suggested establishing and maintaining the least number of funds possible. Hay and Engstrom (1987) also suggested a fund basis for accounting, and they suggested that the number of funds utilized should be such as to ensure compliance with legal requirements and the principles of sound financial administration.

2.2.6 The Fund Accounting Model

Like the commercial accounting model, the fund accounting model has a basic accounting equation. That equation is stated as follows: "Assets = Liability + Fund Equity" (Herbert, Killough, Steiss, 1984). With the accounting equation, the terms may vary somewhat from writer to writer. Lynn and Thompson (1974), for example, do not use the term "equity" in the equation, but rather they use the term "balance."

With commercial enterprises also, the accounting entity can have revenues from a variety of sources and expenses for a variety of reasons. Revenues are defined as an inflow of cash or cash commitments and result in an increase in the fund balance. Expenses, on the other hand, result in a decrease in fund balance because they result in cash outflow or a commitment to a cash outflow. Including revenues and expenses in the accounting equation results in the following identity (Lynn and Thompson, 1974):

Assets = Liabilities + Fund Balance + Revenues - Expenses

The existence of an equation like the above indicates an important characteristic of a fund accounting system, that being it should be double-entry (Anthony and Herzlinger, 1975). The revenue and expense accounts are temporary accounts and are closed into the fund balance account at the end of an accounting period (Lynn and

Thompson, 1974). Both of the above characteristics are common with the commercial accounting model.

Lynn and Thompson (1974) presented a number of other characteristics that can be built into a fund accounting system. One such characteristic is the budget entry in the accounting system. Some writers do not include that provision. Herbert, Killough, and Steiss (1984), however, concurred with Lynn and Thompson (1974), because according to them integrating the accounting and budgeting system can enhance internal control.

Lynn and Thompson (1974) also advocated the use of encumbrances. Encumbrances are commitments for purchase orders which have been issued but the goods and services have not yet been received. That viewpoint was agreed with by Hay and Engstrom (1987).

Each fund should have accounts in each of the major account divisions, namely: assets, liabilities, fund balance, revenue and expenses. Once again a caution should be noted in the establishment of accounts so that appropriate accounts only are established and that the system is kept as simple as possible. Two accounts suggested by Lynn and Thompson (1974), are "Encumbrances" and "Reserve for Encumbrances." In addition, the use of subsidiary ledgers was advocated by these writers.

Encumbrance accounting is an important concept and is worthy of further discussion here. It is of particular significance in organizations that operate under a "lapsing funds" principle. The term "lapsing funds" means that a unit has a budget appropriation for a fiscal period and is expected to operate within that budget during that time. Over-expenditures are usually not permitted, and surpluses cannot be carried over to the next fiscal period. With such tight control over the expenditures process, accounting for the commitments becomes significant. Both accounts, the encumbrance account and the reserve for encumbrances account would be temporary fund balance accounts and would serve very important control functions.

2.2.7 Accounting Standards and Procedures

In the development of an accounting system, it is first necessary to establish some basic premises about the accounting entity and the environment within which it operates. Second, it is necessary to adopt some basic objectives or principles which the accounting system should address. Third, the structure of the accounting system needs to be decided upon. The appropriate funds must be selected, and the appropriate accounts with the funds must also be selected. It should be noted that the number and types of funds can and should be changed to reflect emergent needs. For example, endowments should be accounted for separately (Henke, 1985:361), and the receipt of a new endowment could mean the establishment of a new fund, particularly if the restrictions are different from those of the other endowments.

Once all of the above issues are addressed it is then necessary to implement the system. The rules that govern how specific transactions are accounted for are derived from accounting standards. How do the accounting standards come about? In Canada, the major body responsible for the setting of accounting standards is the Canadian Institute of Chartered Accountants (CICA). According to Beedle (1981), however, the CICA has tended to emphasize the development of generally accepted accounting principals (GAAP) for profit oriented organizations. At the time of Beedle's (1981) research, the CICA did little in the way of setting the GAAP for nonprofit organizations. Subsequent to that time the CICA established a Public Sector Accounting and Auditing Committee to address the GAAP for the public sector. To date, five short statements have been issued. Other bodies also have issued some statements. Among these are the Government Accounting Standards Board, Financial Accounting Standards Board, Municipal Finance Officers Association, the National Association of College and University Business Officers and the Association of Universities and Colleges of Canada, to mention a few. It should be also noted that governments have set standards for institutions under their jurisdiction as well. Due to the variety of sources, a single set of standards did not seem to exist. (Beedle, 1981).

The balance of this section will look at some of the standards recommended by the various sources for accounting for specific transactions. The first issue that will be looked at are the bases of accounting. Henke (1985) identified three bases, these being: full accrual basis, modified accrual basis, and the cash basis. The CICA

Research Study (1981) identified a forth basis, that being the modified cash basis.

The following are the definitions of the four bases as forwarded in the CICA Research Study (1981):

1. Cash Basis: a method of recording transactions whereby the revenue and expenses are recorded in the period in which the related cash receipts and disbursements occur;
2. Accrual Basis: a method of recording transactions whereby the revenues are recorded in the period in which they were recognized and earned and expenses are recorded in the period in which they were incurred, regardless of whether there was an exchange of cash or its equivalent in that period;
3. Modified Accrual Basis: a method of recording transactions whereby major accruals of revenues are recorded but the minor ones are not.
4. Modified Cash Basis: a method of recording transactions whereby revenues are recorded on a cash basis and expenditures are recorded on an accrual basis.

The use of encumbrances and appropriations in the accounts also constitutes a basis of accounting. This approach goes beyond the full accrual basis.

The CICA (1981) recommended that the full accrual basis of accounting be used in the preparation of general purpose financial statements for nonprofit organizations. The advantages resulting from this approach are:

1. the reports which are generated are subject to less manipulation by the timing and recognition of revenues and expenses; and

2. that approach would provide a more accurate and complete picture of the organization's operations and financial position at a particular point in time.

The one major disadvantage of this approach is that the accounting records are far more complex and as a result more difficult to maintain. Regarding the use of encumbrances, however, the CICA (1981), indicates that they may or may not be recorded in the accounts. That should depend on the operational circumstances within the organization.

Like the CICA (1981), the Association of Universities and Colleges of Canada recommended the use of a full accrual basis. Henke (1985), however, has found that the most common practice among nonprofit organizations is to use either cash or the modified accrual basis. Only hospitals and health and welfare agencies are known to use the full accrual basis, according to Henke (1985).

Another important principle deserving mention is the manner in which the accounting for fixed assets is done. Lynn and Thompson (1974) indicated that an inventory of fixed assets should be maintained for internal control purposes. The records should be verified periodically by physical count and surplus items should be removed. Also, according to these writers, fixed assets should be recorded at historical cost and maintained in a general fixed asset account group. These records must be updated on a timely basis and the information reported. Assets purchased with resources from a particular fund may be accounted for in that fund but that would depend on the legal requirements of the funding relative to the particular acquisition.

An issue related to fixed asset accounting is that of depreciation. Essentially there are three methods for dealing with the issue. The first method outlined by the CICA (1981) requires that fixed assets be capitalized at the time of acquisition and depreciated over time. The depreciation expense, which is charged periodically, is a non-cash flow item and would be charged against operations for that period. The asset is carried on the balance sheet which will show original or historical cost, accumulated depreciation and net worth value. The second method outlined by the CICA (1981) was termed the "capitalization only" method. According to this approach, the asset is capitalized but no depreciation is charged. The asset is, therefore shown on the balance sheet at original cost until it is disposed of or lost. The third approach is to expense the asset immediately. What happens here is that the asset is not shown on the balance sheet at all, but is recorded as an expenditure on the statement of operations.

When fixed assets are disposed of, the proceeds from disposal should be shown on the statement of operations. In addition, repairs and replacement should as well be shown on the statement of operations.

Henke (1985) indicated that for most nonprofit organizations depreciation is not recorded in the accounts. Depreciation figures may, however, be included in the schedules and footnotes to the financial statements. One exception, however, was identified by Henke (1985) and that is accounting for enterprise funds and other self-sustaining funds. In these cases depreciation should be accounted for and shown on the financial statements.

The Association of Universities and Colleges of Canada (1984) recommended that all plant assets should be capitalized in the year that they were acquired. They should be valued at historical cost plus any other acquisition or installation costs. No depreciation should be recorded for these assets. In the case of donated assets, the value should be fair market value plus any related costs. One related cost that is not included as part of the capitalized cost is the cataloguing costs of library materials.

Regarding disposals, when an asset is sold or discarded, its value in the account should be reduced to zero. Major repairs are considered to be an expenditure in the year in which they occur and should not be capitalized. Assets acquired under a capital lease agreement should be recorded at the present value of the lease payments. The interest rate used for the present value calculation should be the lower of the borrowing rate and the rate implied in the lease.

Major renovations should be accounted for at historical cost plus any related costs if they result in an extension of facility area. Any interest payments on borrowed money during the construction phase of a renovation should be capitalized as part of the asset. The same holds true for new acquisitions and new construction.

Another major school accounting function identified by Pope and Tikkanen (1984) is that of cash management. Implied in this task is the management of temporarily idle cash, the design and management of a long term investment program, and the ongoing appraisal of such a program. The CICA Research Study (1981) indicated that the cost method for accounting for investments is acceptable. However, the market value of securities should be disclosed in footnotes to the financial statements. Holding gains and losses should be accounted for when realized, and reported in the statement of operations.

Skinner (1972) also identified a number of accounting standards which should be considered in the creation of accounting systems. Among the major points listed are the following:

1. The accounting system should allow for reporting on a program basis so that the total cost of a program during a fiscal period can be readily determined. Implied in this recommendation is that an allocation of indirect costs to a program should take place;
2. The ordinary rules for accounting for inventories and prepayment should be used unless the amounts involved are not material;
3. The costs should not be confused with appropriation of funds;
4. Revenues should be matched with costs so that in a case of a donation, for example, the revenue is recognized in the period when the money is spent on the designated purpose rather than in the period in which the donation is received;
5. Revenues should be classified by source;
6. Fund accounting should not fragment the total operation; and

7. All assets should be accounted for and reported.

Yahr (1988) dealt with the accounting for liabilities. According to Yahr (1988), liabilities should be recorded in an appropriate account and reported on the balance sheet. A severely neglected area is the accounting for compensated absences. These include such items as accumulated sick leave benefits and vacation which has been earned but not taken. Such obligations should be recorded as liabilities if the following requirements can be met:

1. the employees have already earned the benefits;
2. the obligation relates to benefits that accumulate;
3. payment for the obligation is probable; and
4. the amount of the liability can be reasonably estimated.

If the last requirement cannot be met, then the liability would not be reported on the balance sheet but should be indicated through a footnote. These views concur with Lewandowski (1986).

In order to enhance internal control, Clarke (1987) advocated the use of control accounts and subsidiary ledgers as part of the accounting system. Reconciliation of the control accounts and subsidiary ledgers should be done on a regular basis. Also, an inventory system should be set up and be tied to a control inventory account. Both should be verified periodically by physical count.

The final area which is subject to accounting practices is the ancillary enterprises. These are normally self-sustaining activities and include such operations as bookstores, theaters, food services, parking and residences. Ancillary enterprises are usually of two types: those which generate sales by providing a service which is supplementary to the institution's primary function; and those that provide goods and services to other parts of the organization. An example of the latter is the print shop. All of these activities should be accounted separately, and depending on the nature of the enterprise, there can be differences in operating practices. One point of interest, according to the Association of Universities and Colleges of Canada (1984), is that no depreciation should be charged to any of the ancillary operations.

Skinner (1972) identified a major problem with accounting in nonprofit organizations. The problem is the "very wide diversity in practice" (Skinner, 1972:365). Beedle (1981) identified much the same problem. As Beedle (1981) indicated, there is little or no emphasis being placed on the development of accounting principles for the nonprofit sector. A similar situation was recognized by the CICA. It is for this reason that the Public Sector Accounting and Auditing Committee was established with the hope that some of the diversity in practice can be removed. Another indication of the problem is the stand taken by the Association of School Business Officials. Recent issues of its publication "School Business Affairs" which have dealt with education finance concerns have tended to emphasize accounting and reporting.

This problem in large part is a result of there being a variety of sources of accounting standards. No one appears to be the main source of principles for nonprofit organizations. In recent years, various studies have been done in an attempt to develop standards. For the moment, however, it is not clear what sources of information are most pertinent and relevant.

2.2.8 The Reporting Function

The purpose of accounting is to provide useful economic information about an entity. The medium through which the information is provided to users is the reports which are generated. Often accounting and reporting are considered as part of the same system. In this document the two functions will be examined separately, and in concurrence with Beedle (1981:69) who states that "accounting needs to be distinguished from accounting reports."

The users of accounting information about an entity can be classified into two broad categories. There are users who are external to the organization, and there are also those users who are internal to the organization. The reports prepared for external users are generally termed financial reports. Those designed for internal users are management reports. This section will focus on both types of reports and emphasis will be placed on three aspects of each type of report. These are the objectives of the report, the structure of the report and the reporting standards.

2.3 Financial Reporting

In recent years the objectives of financial reporting in the nonprofit sector have received greater emphasis. Schermann (1986) identified various objectives that financial reports for nonprofit organizations and in particular educational organizations ought to meet. Based on the exposure draft developed by the Government Accounting Standards Board (1986), Schermann provided the following possible objectives:

1. to demonstrate propriety and compliance;
2. to provide information about the organization's efforts, costs and accomplishments;
3. to show how the entity financed its activities and how it met its cash requirements;
4. to show sources and uses of financial resources;
5. to provide information about changes in the financial condition and objectives of the entity; and
6. to provide information on the restrictions placed on the financial resources.

To meet the above requirements, GASB Statement Number One recommended that interim financial reports be issued periodically, and a comprehensive annual report should also be issued.

Beedle (1981) also surveyed a number of reasons or objectives for financial reporting. Although it should be noted, once again, that Beedle (1981) did not specifically address reporting by colleges, the objectives that he presented for governmental reporting may be appropriate for colleges. The objectives that he cited were the following:

1. to demonstrate stewardship and compliance with legislative authority;
2. to facilitate evaluation; and

3. to display the state of the finances.

Public Sector Accounting Statement Number Two (1984) published by the Public Sector Accounting and Auditing Committee identified a number of objectives for financial statements as well. It should be noted, however, that the emphasis in that Statement was on objectives for government statements rather than those for post-secondary institutions. The following objectives were listed:

1. Financial statements should provide reliable information which is relevant to the needs of the users. The information should be clearly presented and should be understandable, timely and consistent.

2. Financial statements should provide accounting information showing the full extent of the financial affairs and resources of the organization.

3. Financial statements should demonstrate accountability of the organization for its financial affairs. The information should be useful in evaluating performance and demonstrating procedural accountability.

4. Financial statements should account for all sources, allocations, and use of financial resources.

5. Financial statements should provide information about the organization's financial condition as well as information that can be used in evaluating the ability to finance activities and meet objectives.

2.3.1 Types of Financial Reports

Listed above are some of the objectives for financial reporting which were cited in the literature. In order to meet those objectives, appropriate reports need to be prepared. Various reports were cited in the literature as being of importance. The National Association of

College and University Business Officers (1985) listed the following reports as being necessary to meet the reporting objectives:

1. Balance Sheet,
2. Statement of Changes in Fund Balances,
3. Statement of Current Fund Expenditures, and
4. Statement of Historical Changes in Fund Balances.

Woelfel (1987) also wrote about the appropriate statements which ought to be prepared. He concurred with statements recommended by the National Association of College and University Business Officers (1985).

Hay and Engstrom (1987) were somewhat more specific in their definition of appropriate statements. They indicated the same basic types of statements but they also indicated that the statements should be combined for all fund types. In addition, the Combined Statements of Revenue, Expenditures and Changes in Fund Balance should include budget information. Also, notes and schedules should be provided along with the statements as additional information where appropriate.

The above recommendations were also consistent with the CICA Research Study (1981). According to that study, the general purpose of financial statements should be comprised of the following: a Balance Sheet, a Statement of Operations, Statement of Changes in Financial Position and relevant notes to the financial statements as may be necessary. In addition, the statements should be presented in comparative form so that users can compare the previous year with the current year.

Once the objectives and the types of statements have been determined, the next step is to determine the structure and the format of the statements to ensure understandability. The next section will deal with these two issues.

2.3.2 The Structure and Format of Financial Statements and the Annual Report

Phipps (1986) outlined the format for annual reports. A report should have three sections: an introduction, a financial section and a statistical section. The introductory section should include a letter of transmittal. This letter is a significant part of the document because it can provide general information about services provided, financial highlights, reporting standards, an outline of the accounting system, a description of the budgeting process, a description of the control system, the cost of future opportunities and revenue and expense items.

The financial section would contain the financial statements which would be pertinent in providing the necessary information about the organization's finances. Commonly included statements are the following:

1. Statement of Financial Position;
2. Statement of Changes in Fund Balances;
3. Statement of Changes in Equity in Capital Assets;
4. Statement of Reserves; and
5. Statement of Restricted Funds.

In addition to the statements, this section would also contain the footnotes to the statements.

The statistical section could contain a variety of data. Examples of statistical information would be enrollment by various categories such as program location, nature of students, graduate employment statistics, learning resource holdings, composition of staff by term and classification, and statistics about the physical facilities. The literature is not prescriptive about what statistics to include, but rather it suggests some of the items that might be included.

The introduction should include a brief organizational history, a statement of the nature and scope of services, current goals and accomplishments, prospects for the future, reasons for budget variances, current political, social and economic environment, and significant budget changes. In addition, a brief description of the following systems should be provided: the internal control system, the budgeting system, and cash management and risk management. Piotrowski (1987) does, however, provide a cautionary note in that the introductory section should not be redundant with the footnotes to the financial statements.

Piotrowski (1987) also wrote about the format of annual reports. He identified the following sections as being important: the introduction, mission statement, financial statements, highlights of the financial system and acknowledgements. Like Phipps (1986), Piotrowski (1987) saw the transmittal letter, which is part of the introduction, as an important part of the comprehensive financial report.

With regard to the financial section of the report, and not even considering the types of statements, there are still a number of variations in the format for that section. Beedle (1981), identified a number of possible choices for the format. He indicated that the statements could be combined or they could include separate statements for all of the relevant entities. Consolidated financial statements are normally used when one organization controls another. The statements are combined so as to ignore the separate entities. The report shows the results of a group of entities as one economic unit (CICA Research Study, 1981). Beedle (1981) indicated that should the consolidated statements become a general purpose statement, that would result in certain information being eliminated in the consolidated process.

The combined financial statements, on the other hand, are prepared for organizations in which one does not have or exercise control over the other but which are related (CICA Research Study, 1981). Because that type of statement is not intended to show the entities as one economic unit, less caution is required about the elimination of information.

The approach to prepare separate statements for all entities may be useful because it provides comprehensive information, however, it does not recognize related entities and could result in a tremendous amount of information.

A further option is available. That is the condensed financial statement format (CICA Research Study, 1981), (Association of Universities and Colleges of Canada, 1984). In statements of this type, a great deal of the detail is eliminated or combined in order that an overview of the financial position can be presented and not be clouded by excessive detail. According to the CICA Research Study (1981), if a condensed statement is prepared, it should be called such in the title, and the condensed statement should be the minimum report presented by an organization in a particular year.

Another aspect of the format of reports is the method of presenting the details of the funds. Three methods were described by the CICA Research Study (1981). The first is called the columnar presentation. In this presentation the categories of funds are shown across the top of the statement with a total at the far right. The second method is called the layered approach. With this type of presentation a single balance sheet is presented for all funds. Only the fund balances of the various funds are distinguished on the balance sheet. The third method is termed the integrated method. This approach calls for an integration of assets and liabilities in the balance sheet and a summary of the fund balances in the capital section. Sufficient disclosure, however, is required in the footnotes to these statements so that the assets and liabilities of funds can be recognized and distinguished. Revenues and expenses are also pooled and the necessary notes should be included.

Although there appears to be some consistency in the types of reports which ought to be presented, there seems to be a good deal of diversity in the format in which they are presented. There is always the risk that varying formats can be confusing and misleading to the users. Consequently, it would be advisable to have a consistent format.

2.3.3 An Alternate Reporting Model

Vargo (1977) outlined a variety of difficulties that exist with current reporting practices by colleges and universities. First, because the fund accounting model is used, there are often too many funds to account for and report. As a result, the overall financial picture of the organization is obscured. Second, the existence of board-designated and restricted funds as well as reserves can distort the financial picture of the institution as a whole. The main purpose of reports and statements is to communicate useful information to users. The reporting structure, however, is often so complex that it impairs the communication function.

To overcome some of these difficulties, Vargo proposed a number of changes to the structure of the financial reports. First, all fund groups should be combined into a restricted group and an unrestricted group. Second, the columnar format for reports should be used. Third, only the following statements should be prepared: a Balance Sheet; a Statement of Revenues and other Additions, Expenses and Changes in Fund Balance; and a Statement of Changes in Financial Position for comparative purposes. Fourth, notes and supplementary schedules should only be prepared when appropriate. Fifth, the statements discussed previously should be combined for all funds. The reasoning behind this suggestion is that the college or university is itself a single entity and not a series of entities. A difficulty with this recommendation was conceded, however, in that boards can only spend unrestricted funds at their discretion. Combining all fund types would result in an inability to distinguish conditional funds from unconditional funds. Sixth, much of the detail pertaining to plant funds should be eliminated. Plant funds should be reported as either restricted and unrestricted. Seventh, the statement of revenues and other additions, expenses and changes in fund balances should report the cost of operation and not just receipts and disbursements. Also depreciation should be reported. The purpose of this is to spread the cost of the asset over its useful life. Eighth, investments should be reported at market value rather than at cost. The reason for this assertion is that market value is closer to realizable value than is historical cost. Ninth, interfund transfer must be netted from the revenue and expenditure of the participating funds. These transactions are neither revenues nor expenditures and not netting them out for reporting purposes will result in overstatements in the revenue and expenditure accounts of the affected funds. In other words, the transfer must be done "below-the-line."

Another recommendation put forward by Vargo regards the disclosure of information in footnotes. Accordingly, the following information should be reported in footnotes:

1. major accounting policies and procedures;
2. total performance of investments showing both cost and market values;
3. details of long-term debt;
4. details of interfund borrowing;
5. an analysis of the functional expenses; and
6. unit cost information which could be based on credit hours, courses, student or perhaps full-time equivalencies.

The recommendations put forth by Vargo were driven by three factors. These factors were: declining enrollment, spiralling costs and difficulties in reading and understanding the traditionally prepared statements. Some of their suggestions have been elaborated upon by other writers. Others, however, have not, probably because these suggestions represent a major departure from some of the current practices.

2.3.4 The Objectives of the Financial Statements

Numerous writers have addressed the issue of the objectives of financial statements for the nonprofit sector. The Public Sector Accounting and Auditing Committee addressed the topic in its Public Sector Accounting Statement Number 2 (1984). The statement was directed more specifically at government rather than at nonprofit organizations in general. The objectives issued, however, do seem to be appropriate for other organizations in the public sector.

The first objective suggested that the information provided should possess a number of characteristics. First, it should be relevant, in that it should be useful in meeting the needs of the users. Second, it should be reliable, which means that it can be verified by an independent observer. Third, it should be understandable. It should contain sufficient detail but not excessive detail that could detract from the clarity of the information. Fourth, the information should be presented on a timely basis. Information which is outdated has limited usefulness. And finally, the information should be consistent from period to period so that interperiod comparisons can readily be made.

The second objective suggested that the statements should provide a full accounting of a government's financial affairs and the resources for which it is responsible. In meeting this objective, the needs of the user must be considered. Where appropriate, statements may be consolidated or combined with the statements of other entities. In other cases, the statements of an individual entity's activities should be provided separately. This decision should be based on how the users' needs could best be served.

The third objective indicated that the statements should demonstrate procedural accountability of the government. This means that the statements should demonstrate that the resources for which the government was responsible were administered in accordance with the appropriate regulations, conditions, and authorization.

The fourth objective indicated that the statements should provide information about the nature and purpose of all expenditures and revenues. All revenues and expenditures should be accounted for by program, by function, by object of expenditure, and perhaps by organizational unit.

The last objective related to the financial position of the government at the end of the fiscal period. Sufficient information should be provided to adequately describe the financial position of the government and to assess the ability of the government to finance its planned programs and to meet its obligations. The nature and terms of its objectives should be disclosed, as should the future service potential of its assets.

The objectives outlined by the Association of Universities and Colleges of Canada (1984) generally concurred with the ones outlined by the CICA Public Sector Committee. Accountability is mentioned as one of the objectives. It is, however, difficult to discern whether the objective implies the need to assess consequential accountability, or whether only procedural accountability needs to be considered.

Henke (1985) also concurred with the views of the Public Sector Accounting and Auditing Committee in regard to governmental accounting and reporting. With regard to colleges and universities, on the other hand, he identified a number of instances in which such organizations differed from government. Among some of the differences were the following:

1. the fund accounting model is the basis for college and university accounting, but the model is not as strictly adhered to as it is in governmental accounting;
2. the activities of ancillary enterprises in colleges and universities are often accounted for on a departmental basis rather than on a fund basis;
3. more emphasis is placed on matching of revenues and expenses in the reports of colleges and universities; and
4. colleges and universities place less emphasis on budgetary data in the reports than do governmental organizations.

It was also indicated that income earned by restricted current funds should be reported as revenue only to the extent that there were expenditures from that fund during a particular reporting period.

Schermann (1986) also addressed the issue of the objectives of financial reports. Like many of the writers in this field, Schermann identified the need to demonstrate accountability as an important objective of financial reporting. To Schermann (1986), demonstrating accountability meant that appropriate responsibility was exercised with any constraints which had been imposed. This approach seems to imply only adherence to procedural accountability. Other objectives identified were the following:

1. to assist users in evaluating efficiency and economy of operations;
2. to assess financial condition and the financial results of operations; and
3. to provide a comparison of actual results with budgeted forecasts.

The latter objective has a number of important implications First, it requires that all organizations prepare a budget and get it approved. This is consistent with the views of Scheps and Davidson (1978). Second, there is need for a close relationship between the budgeting system and the reporting system. This implication is consistent with the views of Herbert, Killough and Steiss (1984), who indicate that one of the essential problems in public sector financial management is that there is little or no relationship between the various financial subsystems such as budgeting, accounting, reporting and control. The objective, however, is an important one in that it allows users to make a judgement about the effectiveness of financial planning by the organization.

In conclusion, the objectives of financial statements and financial reporting are to provide users of the reports with information which allows them to assess the accountability, economy, and efficiency of the organization. That assessment permits users to make a variety of decisions in relation to the organization, some of which could be funding decisions.

2.3.5 The Standards and Procedures of Reporting

Given the objectives of financial reporting by colleges and universities, the next step is to develop standards and procedures that govern the reporting process. Various writers have addressed the issue of standards and procedures for reporting. Once again, the development of standards and procedures is often addressed from a global perspective of nonprofit organizations. Some writers have, however, looked specifically at the needs of the post-secondary education sector.

Scheps and Davidson (1978) listed a number of principles for colleges and universities specifically. The following are some of the standards which they addressed:

1. All financial transactions should be recorded and reported by fund groups. This implies that reporting, as well as, accounting should be done on a fund basis.

2. Funds held in trust on behalf of other groups or individuals should not be reported as assets of the institution because they are often revocable. Any revenues accrued to the institution from trust funds should be reported as gifts or donations.

3. The reports should reflect four pieces of information in relation to the plant fund groups. A distinction should be made between the funds held for the following purposes: funds held for the construction, renovation and acquisition of physical facilities; funds already expended for plant facilities; funds set aside in a reserve for the replacement of facilities; and funds set aside for the retirement of debt.

4. Interfund transactions should not be reported as revenues and expenditures of the funds. Rather they should merely be recorded as assets and liabilities in the respective funds, and the transfers should be recorded below the line.

5. Restricted funds must be reported as revenues in the year in which they are expended for their designated purpose.

6. Unrestricted current fund revenues must be reported as revenues only to the extent that they are earned in the year in which they are received.

7. The reporting should be done on an accrual basis.

8. The operations of ancillary enterprises must be shown separately from other institutional operations.

9. A comprehensive financial report should be prepared annually.

The Public Sector Accounting and Auditing Committee issued the Public Sector Accounting Statement Number Three (1986) to provide some general standards for financial statement presentation. Like the other statements issued by this body, this one also was directed toward governments in general rather than toward other nonprofit organizations. Following is a summary of the standards provided:

1. The financial statements should be clearly identified as should any accompanying notes and schedules.

2. The financial statements should provide a fair presentation of financial condition and results of operations. All material items need to be presented and materiality is to be determined by professional judgement.

3. The statements should use terminology which is understandable to the users.

4. A comparison of current and prior period figures should be provided.

5. The bases used to calculate the amounts of the assets and liabilities should be disclosed.

6. Auditors' reports should be appended where appropriate and unaudited statements should be identified as such.

7. The balance sheet should report all liabilities of the entity at the end of the accounting period such as accounts payable, accrued liabilities, pension obligations, and loans and advances. The nature and the terms of the liabilities should also be disclosed.

8. All financial assets of the government such as cash, accounts receivable, inventories for sale, advances to other governments, and investments should be disclosed along with the terms of the assets.

9. Encumbrances should be presented in the notes. Also, all material contingencies should be described and reported in the notes.

10. The financial statements should provide sufficient information to describe the fixed assets held by the government at the end of the fiscal period. The fixed assets should be reported at historical cost or estimated fair market value where historical cost is not known. Also, the remaining service potential should be reported. This latter recommendation strongly implies the use of some form of depreciation accounting.

11. The statement of revenues and expenditures should report expenditures by function and by major program. Expenditures should as well be disclosed by object of expenditure.

12. Gross amounts of revenues and expenditures should be reported.

13. Revenues should be reported on an accrual basis.

14. The statement of changes in financial position should show the changes in cash during the period and the total cash requirements during the period. The method of financing of activities should also be reported. In other words, all fund sources should be disclosed.

15. The statements should present a comparison of actual results with budget projections. Also, sufficient information to demonstrate compliance with legislative authority should be provided.

Henke (1985) emphasizes the need for disclosure in the financial statements of nonprofit organizations. The principle, according to Henke, should be that of full disclosure. According to Henke (1985:37), "the principle of full disclosure requires ..."that all significant financial facts are appropriately disclosed, either within the body of the financial statement or in footnotes or parenthetical statements." The term "significant financial fact" is to be considered in relation to the principle of materiality. Facts that are not material but merely interesting should not be reported or disclosed.

The development of standards for reporting by the nonprofit sector, in general, is still in its formative stages. This is not dissimilar to the development of accounting standards. As was stated by Beedle (1981), the reason for the late development of standards is that no single body has taken up the task to develop them. Various groups like the Canadian Institute of Chartered Accountants and the Association of Colleges and Universities of Canada have indicated that more emphasis will be placed in this area in the future. It is perhaps being recognized that many nonprofit organizations like post-secondary educational institutions utilize a tremendous amount of public resources. The issue of return on these expended resources must be addressed. Also, outsiders making decisions in relation to these organizations need information of appropriate quality. In order to provide that appropriate quality, it is necessary that standards for reporting be clearly delineated. Without standards it is difficult to demonstrate accountability, economy, and efficiency and cost effectiveness for any organization. To make interorganizational comparisons is even more difficult.

2.4 Management Accounting and Reporting

Financial accounting and reporting, as discussed in the previous section, is concerned primarily with the needs of information users who are external to the organization. Financial reporting, according to Scheps and Davidson (1978), is an extension of the accounting system. If the two systems are established and work in concert, the accounting system's role is to collect the appropriate information, and providing the information in a useable form to users becomes the role of the reporting system.

In addition to the external users of information, there are users who are internal to the organization. Examples of internal users in a typical post-secondary institution are chairpersons, deans, department heads, and senior managers. The needs of these users are not necessarily the same as those of the external users. Therefore, reports of a different nature are often appropriate.

Scheps and Davidson (1978) identified four types of financial reports which need to be prepared. These are: the budget report for department heads, the internal reports for the senior management and the board, interim reports for management, and the annual financial report. Only the last report is specifically designed to meet the needs of external users. The first three are designed primarily for internal users.

The budget report provides information about budget allocations, expenditures, encumbrances and the unexpended balances. Two advantages of this report were cited: it helps to enhance departmental accountability, and it helps the accounting department to locate errors.

The internal reports and the interim reports which are prepared for senior management and the governing board are normally prepared on a monthly, or on an as-needed basis to provide these users with a mechanism by which they could check on the progress toward the achievement of stated objectives. It is on the basis of these reports that problems can be detected and remedial action implemented. Scheps and Davidson (1978) listed a number of the internal and interim reports which could be prepared:

1. a balance sheet;
2. a statement of actual results compared to budgets, and variances;
3. a detailed statement of allocations and expenditures;
4. a statement of realized revenues;
5. an operating report for ancillary enterprises; and
6. specific reports on any aspect of the organization.

The preparation and provision of information to internal management is termed managerial accounting (Herbert, Killough, and Steiss, 1984:5-6). The purpose served by managerial accounting is threefold: planning, decision making, and control. According to Herbert et al (1984), managerial accounting differs from financial accounting in a number of important respects. These are:

1. Managerial accounting is not governed by generally accepted principles. The reason for this is that few attempts have been made to develop generally accepted principles for managerial accounting.
2. Managerial accounting tends to be more future oriented rather than historically oriented like financial accounting.
3. Managerial accounting is not a mandatory or legislated requirement.
4. Managerial accounting emphasizes segments of the organization rather than the whole organization.
5. Managerial accounting can place more emphasis on non-monetary data.
6. Managerial accounting places more emphasis on relevance of information and flexibility.

In addition to identifying important differences between financial and managerial accounting, Herbert et al (1984) also identified an important component of managerial accounting. This component is referred to as cost accounting. Cost accounting deals with cost, in general, cost allocation methods, and systems for the determination of costs. The need for having systems to determine costs and for their allocation certainly concurs with the views of various other writers, including: Scheps and Davidson (1978), Levin (1983), and Dominiak and Louderback (1985), to mention a few.

2.4.1 Cost Accounting

Scheps and Davidson (1978) indicated that colleges and universities typically carry out a type of accounting which they termed expenditure accounting. This type of accounting is concerned primarily with cash payments and the accruing of liabilities. Cost accounting, on the other hand, is more concerned with the consumption of resources and the attempts to relate costs to specific areas or units of work.

Levin (1983) presented a model for the identification of costs. Costs are associated with each program, according to Levin, because each program uses resources that could have been applied to other programs. The model presented by Levin is called the "ingredients model" because it requires a specification of all of the cost ingredients of a program. A program ought to be described in terms of the resources that are required to operationalize it.

The model requires the specification of five major ingredients. These are: personnel, facilities, equipment and materials, the program inputs, and the client inputs. Once the ingredients and the amount of each are identified, the cost of each must be determined. Two approaches can be used to determine the cost of each ingredient. The first is the market price approach. This approach, however, is workable only when market prices exist. If they do not, this results in a complex situation because estimating becomes necessary. This can become arduous. The second approach relies on basic first principles which could take pre-determined standards into consideration. Whichever approach is used, valuing of the ingredients is an important and necessary process. Appropriate cost analysis can enhance budgeting as well as planning. Also, a knowledge of costs will enhance management's ability to provide financial control over operations and thus address economy, efficiency, and effectiveness of organizations.

Like Levin (1983), NACUBO (1984) in its publication "*College and University Budgeting*" also identified the need to have a cost accounting system within a college or a university. A five-step cost accounting procedure was recommended. Following are the five steps:

1. First designate the cost centres for the organization and also the cost objectives. According to NACUBO (1984:199), there are a number of cost objectives. Among the more common ones are instruction, research, public service, instructional and academic support, student support and services, institutional support, facilities administration, and the ancillary enterprises.

2. Second, it is necessary to establish categories of costs. This activity pertains to the establishment of objects of expenditure. They should be consistent across all cost objectives to the extent possible. Examples of objects of expenditure are salaries, wages, professional development, and a variety of employer costs which in Canada would include Canada Pension, Unemployment Insurance, public pension, and long-term disability, to name a few.

3. Third, determine what NACUBO (1984) termed tier one costs for all cost centres and objectives. Tier one costs include remuneration plus benefits, supplies and services, materials, travel, services which are purchased on contract, and accountable supplies, which include items that are attractive but do not meet capital criteria.

4. Fourth, determine all tier two and tier three costs. The tier two costs are all indirect costs that relate to a cost centre and include support services like budgeting, accounting, computing services and facilities management and maintenance. The tier three costs are the allocation of an amortization expense against buildings and other capital items. All of these costs should be assigned to the appropriate cost centres or cost objectives.

5. Finally, all tier two and tier three costs should be allocated to the final cost objectives and the cost centres within those objectives. In colleges, instruction is a final objective. Therefore, each cost centre within the instruction cost objective should be allocated all of the other costs. Once this is done, a unit cost or an output measure can be developed.

NACUBO (1984) also stressed the importance of unit costs. The unitization of costs can be relatively sensitive issue. An acceptable unit cost in one cost centre or program may be totally unacceptable in another. In order to minimize such sensitivities, the assignment of tier one costs and the allocation of tier two and tier three costs must take into consideration the specific and unique needs of the individual programs and cost centres.

Cost accounting is concerned with the utilization of resources. Such information provides a critical basis not only for the development of reports for internal users, but also for the development of budgets. A more detailed discussion of budgeting systems follows in the next section.

2.5 Budgeting

As was illustrated in previous sections, the development of standards and procedures for accounting and reporting in the nonprofit sector has been slow. Only in recent years has more attention been paid to that sector. The same is true for the development budgeting standards and procedures. As a matter of fact, budgeting as a process or an activity is relatively new. As a result, there are no generally accepted principles for budgeting, but rather some broad approaches to the process. These approaches are adopted in particular situations and may change as circumstances change. In this section we will look at the various processes that can be used by educational organizations.

2.5.1 Approaches to Budgeting

Various writers have discussed a number of approaches to budgeting and how budgets for organizations can be developed. The particular approach that an organization may adopt will depend on a number of factors, such as the size of the organization, the degree of participation which is desired, and the degree to which authority and decision making is centralized or decentralized. NACUBO (1984) provided a fairly comprehensive presentation of various approaches and is supported by other writers such as Benson (1978), Garner (1991), and others. NACUBO provided six approaches to budgeting: incremental budgeting; line-item budgeting; program budgeting; zero-based budgeting; performance budgeting; formula budgeting; and cost centre budgeting. What follows is a brief description of each approach.

Incremental budgeting focuses on increases or decreases to the previous year's budget, hence the term incremental. The total budget is not analyzed when this approach is used. The increment by which the previous year's budget will be adjusted is determined, that factor is applied, and the new budget is developed. The process is relatively mechanical once the increment of change is determined. The approach can minimize much conflict within an organization. It does not, however, allow for evaluation and program planning which should drive the budgeting process.

A second approach to budgeting discussed in the literature is termed line-item budgeting or object of expenditure budgeting. The line-item approach shows the expected expenditures in each budget line. Examples of some typical budget lines or line-items are: salaries, temporary staff salaries, benefits, staff development, supplies, and travel, to mention a few. Due to the control nature of this approach, it emerges as a very popular approach in times of restraint. Normally appropriate performance would mean expending the allocated amount or slightly less than that amount, but not an amount greater than the allocation.

Another approach is termed program budgeting. Program budgeting is based on the establishment of short-term and long-term objectives, the subsequent development of programs to meet those objectives, and the costing of various program alternatives. The final component of program budgeting is the development of a system to review the plans, the progress toward attainment of the plans, and the budgets. A technique that is often used along with this approach is cost-benefit analysis. One major feature of program budgeting according to Garner (1991) is that the goals are set at the top of the organization and the budgeting process is a downward process.

Another approach, and one related to program budgeting, is zero-based budgeting. Under this system, budgeting starts with a zero amount each year. Plans are drawn up each year, programs are developed and a costing of the programs is completed. All programs are reviewed and justified. The programs which are successfully justified must have their budgets approved. Upon that approval the program is sanctioned. This approach is similar to program budgeting in that it requires planning, programming and budgeting, but it differs in that the plans are developed from the bottom rather than from the top.

The fifth approach to budgeting is referred to as performance budgeting. According to Garner (1991), performance budgeting is similar to line-item budgeting, however, instead of emphasizing objects of expenditure, the emphasis is placed on activities such as instruction, student services,and administration. Along with these activities various performance measures are developed so that the performance of the activities can be evaluated. In some respects this approach emphasizes the cost objectives which were discussed earlier.

NACUBO (1984) identified another approach to budgeting. This one is the formula method. With this approach, relationships are developed between program demand and program cost. That relationship results in a formula which is the basis on which a budget allocation is made. An example of this approach is relating facility area to the number of dollars required for caretaking. The budget for caretaking would therefore be based on the area of the floor space.

The final approach which is discussed by NACUBO is termed cost centre budgeting. With this approach every unit is treated as a self-supporting unit. Revenues are inputted against the unit and all costs are netted against the revenues. The cost allocation depends on the net draw on the institutional resources.

It should be noted that the above-mentioned budgeting approaches are not mutually exclusive. Some of the approaches have common elements and methods. In addition, the budgeting system used by a particular organization can contain elements from one or more of the approaches. In that regard, the theory of budgeting is not as well refined as some of the aspects of accounting and reporting.

2.5.2 Budget Cycles

Most organizations operate on a fiscal year that is often different from the calender year. For example, the provincially administered institutions in Alberta operates on the April first to March thirty-first year. The public colleges operate on July first to June thirtieth year. According to the various writers, other fiscal years may exist in practice.

Regardless of what the fiscal year is, the budgeting process involves more than one year. NACUBO (1984) termed the budgeting activities which span a number of years as a budget cycle. For example, the year which the organization is in, which we will term the current year, requires budget administration. Often, however, the activities of the preceding year are being wrapped up in the current year. Therefore, the preceding year's budget must be reviewed and the budget for the year immediately following the current year must be estimated. In addition to the immediately following year, many funding sources may require some general estimates of a longer-term nature. This may be for two years hence, or in some cases even longer. Again, according to NACUBO (1984) there is no standard as to the number of years a budget cycle may overlap. The amount of overlap will vary from organization to organization and from system to system. The important point is that there is usually some overlap, and this tends to complicate the budgeting process.

2.5.3 Budget Instructions and Preparation

According to NACUBO (1984) and other writers, the budgeting process usually commences with the issuance of budget guidelines or instructions. These instructions are constraints under which budgeting is to be carried out. Some examples of constraints may be enrollment levels and trends, global budget changes, and the ability or lack of ability to establish permanent positions. These guidelines may be system-wide, organization-wide, or a department-wide.

Once the instructions are issued the budget preparation process begins. The nature of these activities can vary greatly from one context to another. In some contexts, preparation may require the estimating of revenues and expenditures based on approved plans or prior year's budgets. Upon completion, the budget requests are submitted for review and approval. In other contexts, there may be no preparation of budget requests. Budgets may simply be prepared at top levels of the organization and be handed down in approved form.

2.5.4 Budget Review, Revision and Reporting

Regardless of whether the budgeting process operates top down or bottom up, there are usually some review and approval mechanisms in the process. Senior administration may review the budget requests on a line-by-line basis or on a global basis. The review process may or may not have provision for bargaining and the making of tradeoffs. In some instances, budget revisions may be made without consultation with budget centre managers. A number of factors will determine this.

Among them are such issues as institutional character and centralization of authority (NACUBO, 1984).

Another important aspect of budgeting is the revision of budgets during the fiscal year. In some organizations budgets may be revised quite frequently, such as monthly, quarterly, or semi-annually to reflect environmental changes. In other organizations, the budget, once established, is not changed during a fiscal period.

Very often budget revision, if allowed, is driven by budget reports. Reports which compare actual activity to budgeted activity can be very useful in triggering the need for revision. Reports, on the other hand, which do not show any comparisons will not be useful in indicating the need for revisions. Depending on the organization, the nature of the reporting will vary. In some organizations no reports may be prepared.

As has been seen from the foregoing discussion there are a variety of interrelated budgeting processes, cycles, and budget preparation, review and reporting approaches. Most organizations carry out some type of budgeting. The approach and processes will vary from organization to organization and even within organizations. NACUBO (1984) listed a number of factors which will influence the nature of the budgeting system. These factors are: institutional character, the degree of trust and openness within the organization, the degree of centralization, and the need for information. Based on how these factors interrelate, the budgeting system within the organization will evolve.

2.6 Summary

This chapter dealt with a review of literature that pertains to accounting, budgeting, and reporting within colleges and other post-secondary organizations. The accounting theory in the public sector in general is not well developed. However, research is being carried out to further the development of accounting and reporting theory. With this further development there may be an evolution to more consistent practices and a greater recognition for its need. The theory, however, is not as well developed as it is in the commercial sector. With regard to budgeting, there appears to be some semblance of a general framework, but the theory is not at all well developed. Likewise, attempts are being made to further develop budgeting theory for the public sector.

Chapter 3

DESIGN OF THE STUDY

3.1 Introduction

The principle aim of this study was to gain knowledge about the accounting, reporting, and budgeting systems which are used at three selected non-university, educational institutions in the Province of Alberta. The basic postulates, objectives, principles and standards which underlie the accounting practices, as well as the basic principles underlying the budgeting and reporting practices were the focus of the study. The study utilized a syntactical approach to accounting theory development as described by Hendriksen (1977). A description of the three levels of accounting theory which are discussed by Hendriksen (1977) is provided.

The main methods of data collection were observation, document analysis, and interviewing. The data were analyzed using the content analysis techniques described by Bogden and Biklen (1982). Validity and reliability were established in accordance with the principles of qualitative inquiry described by Lincoln and Guba (1985).

The final result of the analysis was three parallel descriptions of the budgeting, accounting, and reporting systems which were used at the three selected non-university institutions. From these descriptions, comparisons of the practices were made, common practices were identified, and the intersystem relationships were discerned. Caution was exercised in dealing with the generalizability of the results, but the results provide a very useful basis for generating hypotheses for future studies which could apply more rigorous tests.

3.2 Overall Plan for the Study

3.2.1 Type of Study

In broad terms this study was a multi-case, comparative case study as described by Bogden and Biklen (1985:59). It was multi-case because it involved more than one subject. It was comparative because the practices at the three institutions in the study were compared. The examination of the subjects was detailed and extensive, and the study resulted in a description of a wide range of practices. The focus of the descriptions was on current practice.

3.2.2 Levels of Accounting Theory

According to Hendriksen (1977), a theory should be capable of predicting the occurrence of an event or of being able to explain the event. Hendriksen described three levels of accounting theory. These three levels are the syntactical level, the interpretational level, and the behavioral level.

The syntactical level attempts to explain how accountants would react to particular situations at a particular point in time. In other words, it would attempt to explain current accounting practice. Examples of current practice would be the particular accounting treatment accorded various types of transactions such as the accounting of fixed assets, the use of depreciation accounting, the timing of revenue recognition, the accounting for repairs to equipment, and the accounting for pledges receivable, to mention a few.

The second level of accounting theory, as identified by Hendriksen (1977), is the interpretational level. This level attempts to identify a relationship between accounting symbols and a real-world phenomenon which may have a physical existence. An example of an accounting symbol is surplus or fund balance which appears on the balance sheet of nonprofit organizations. Interpretational theory attempts to find a real-world object which would represent the abstract concept of surplus or fund balance.

The third level of theory is the behavioral level. This level focuses on the impact that accounting information has on users of that information. In commercial accounting, for example, the efficient market hypothesis indicates that the financial markets will instantaneously adjust to new information if the same information is released to all users. In order to satisfy the requirements of this theory, it is necessary to identify who the users of accounting information are, what their information needs are, and to locate any common needs. Reports are then designed so that they may present the information that meets the needs of the users.

This study focused primarily on the syntactical level of accounting theory. The purpose of the study was to explain current practice in accounting, reporting, and budgeting and how budget administrators reacted to particular financial transactions. Some emphasis, however, was placed on the behavioral level. User needs for accounting information were assessed, and an attempt was made to discover who the users were and what their common information needs were. The behavioral level of theory development is nonetheless treated on a much smaller scale than is the syntactical level.

3.2.3 Components of Accounting Theory

The development of accounting theory requires, according to Hendriksen (1977), the identification of various components. These components are:

1. the basic postulates which relate to the political, economic and social environment within which the organization operates;
2. the objectives of accounting;
3. the principles which are derived from the objectives; and
4. the specific accounting rules or standards that are used to determine the accounting treatment for specific transactions.

This study focused on all those aspects. The basic postulates were regarded as being common to the budgeting, accounting, and reporting systems. It was assumed that the same postulates applied to all three systems.

3.2.4 Type of Reasoning Used

Hendriksen (1977) identified two basic approaches to reasoning which can be used in the development of accounting theory. These approaches are the deductive approach and the inductive approach. The deductive approach is often used in conjunction with normative theory and attempts to describe "What ought to be." It usually starts with basic premises and concludes with specific applications or events. The inductive approach, on the other hand, is most often used in conjunction with descriptive theory and attempts to explain "what is." It involves the drawing of specific conclusions from specific observations. Generalizations may be drawn from specific relationships.

This study utilized the inductive approach. As indicated earlier, however, the generalizability of the conclusions reached is limited to the three institutions studied. Generalization beyond those three would require further study and perhaps more rigorous analysis.

3.3 Collection of Data

This section deals with the collection of the data for the study. Five major topics are covered. They are:

1. identification of the information which was necessary for the study;
2. selection of the most appropriate data collection methods;
3. selection of the population from which the data were collected;
4. gaining access to that population; and
5. collection of the information at each of the colleges.

3.3.1 Identification of Required Information

As stated in Chapter 4, the purpose of the study was to provide descriptions of the accounting, budgeting and reporting systems in the non-university institutions which were selected for the study. Once the descriptions were completed, the accounting systems used in each of the institutions were compared. The impact that the accounting system in each institution had on both the budgeting system and the reporting system was determined. Of particular significance was the comparability of the reports which were generated. In order to meet these objectives, various types of data relating to each of the systems were necessary. The following sections will briefly describe the nature of the information which was sought.

3.3.1.1 Accounting Information

Various aspects of the accounting systems were explored. The first was to determine who the users of the accounting information were. Once the users were determined, the next step was to determine what needs they may have. It is important to note that the needs of the internal users can be different from those of external users (Gordon and Shillinglaw, 1974). Therefore, the needs of both users were described.

Once the data pertaining to the users and their needs had been collected, the basic assumptions underlying the accounting systems were researched. This was in accordance with the recommendations of Hendriksen (1977). In addition, the objectives of the accounting system as well as the accounting principles were determined for each institution. Following this, the specific accounting standards which dealt with the accounting treatment accorded certain types of transactions were determined.

Most public organizations use the fund accounting model. The number and the type of funds that make up the accounting system were determined, as were the account divisions in the accounting system. Also, the sources of the accounting standards were investigated. The above constituted the basis of the description of the accounting system.

3.3.1.2 Reporting Information

As with the accounting system, it was important for reporting purposes to identify who the information users were and what particular information needs they had. Also the underlying environmental assumptions pertaining to the social, political and economic environment were assessed. In this study the environmental assumptions were assumed to be the same for all three systems. No attempt was made to determine those assumptions separately.

Next, the objectives of reporting were determined and so were the reporting principles and standards. Although the reporting objectives, principles, and standards could be very similar or even identical to the accounting objectives, principles, and standards, no assumptions about their similarities were made and, as such, a separate attempt was made to determine those characteristics for the reporting system.

Based on the objectives, principles, and standards of the reporting system, other specific aspects of the reporting system were researched. The types of financial statements which were prepared were researched, as was the format for the financial statements. Also the degree of consolidation and combination was researched.

Special attention was also given to the types of reports which were prepared for both internal and external users of the information. According to Scheps and Davidson (1978), the content of internal reports is often generated by the budgeting system as well as by the accounting system.

As to the external reports, particular emphasis was paid to the annual report. Its composition was reviewed as were the purposes of its various component parts, such as the auditors report, the footnotes, the schedules, the statistical section, and the narrative section.

In addition, the sources of standards were investigated to determine if there were similar sources which were utilized by the three colleges which were studied.

3.3.1.3 Budgeting Information

As with the accounting and reporting information, a similar pattern was followed with the collecting of budgeting information. The information users and their needs were determined. The basic underlying assumptions were determined. The latter information was not determined separately because it was assumed that underlying assumptions were common with those of the accounting and reporting systems. In addition, no attempt was made to determine specifically the objectives of the budgeting systems although the objectives were implied in the budgeting standards or procedures which were thoroughly investigated. Included in the investigation of the budget procedures was a review of the budget factors which entered into the development of a budget.

3.3.2 Selecting the Participating Organizations

As was discussed earlier, there are a number of categories of post-secondary institutions in the Province of Alberta. Among these are: universities, public colleges, private colleges and provincially administered institutions. The decision to investigate public colleges was based on the researcher's interest in that sector. Within that sector, however, are a number of subcategories, namely, the community colleges, the technical institutes and those colleges whose mandate is to offer specialized programming. In addition some institutions are situated in large urban settings, whereas others are located in smaller towns or cities which may give them a predominantly rural flavor.

As is described in the following section, however, a study of this nature may be rather sensitive particularly in times of fiscal restraint. For this reason, the institutions studied must remain anonymous and be described only as public non-university, post-secondary institutions. No further description can be provided so as to ensure that the trust which was established between the institutions and the researcher is not violated.

3.3.3 Gaining Access to the Organizations

Once it was decided to narrow the study to public colleges, the next task was to gain access to three institutions. Given the possibly sensitive nature of the study because of its dealing with financial information systems, gaining access could have proved to be quite challenging. It sometimes required the approval of the most senior executive in the organization. The steps followed in this process were those described by Lincoln and Guba (1985). They were:

1. making initial contact and gaining entry;
2. negotiating consent; and
3. building and maintaining trust.

Once it was generally decided which institutions were preferred for the study, the initial contact was made. With College 'C' initial contact was made through a senior officer of that college who at the time was a student colleague of the researcher's. The nature and purpose of the study was described. Also, the fact that the institution's participants and the institution would remain anonymous was emphasized, as was the fact that the study had no interest in the specific numbers found in the accounts, but the sole interest was in the processes which were used. The senior officer proceeded to relay the request with his concurrence to the senior administrative officer of the college.

When the researcher contacted the senior administrative officer it was found that a favorable climate had already been established. It was necessary to reaffirm the purpose of the study and the confidentiality of the information. This was followed up by a letter. The senior administrative officer then sought the consent of the President who granted permission on the basis of the purpose and design of the study.

With College 'A', the process followed a similar pattern with one exception. The initial contact took place with a manager in the finance department who reported directly to the senior administrative officer. The manager proved to be excellent in getting by gatekeepers and securing consent. The entire process then followed an identical pattern to that used in College 'C'.

At College 'B' the process was somewhat more trying. The researcher had no acquaintance to act as an intermediary with the senior financial officer, and as a result, there was no past trust relationship which could be relied on. The contact, therefore, was made directly with the senior administrative officer. Initially that contact was by telephone. The focus of that first conversation was to briefly describe the purpose and design of the study, and to seek a meeting with the officer in order to emphasize the potential benefits of the study and also to indicate that the study would not be a burden on institutional staff. It was explained that the meeting would not create any obligations. The meeting was not achieved by the first conversation, but a further telephone conversation was scheduled after the officer had an opportunity to reflect on the first conversation. During the second telephone conversation, the senior officer seemed more confident about the study and agreed to a meeting.

This face-to-face meeting was critical to gaining access. Elaboration of the purpose, design, benefits, and confidentiality of the study were carefully presented to ensure understanding. From that point forth, the process was similar to that of the other two institutions, however, it did take longer. More questions were asked about the study in subsequent telephone conversations. It was believed that access was harder to gain because there was no trust relationship between the researcher and any officials at the institution, and that trust building was necessary before access could be gained.

In order to enhance the trust relationship in all three cases, it was agreed that prior to submitting the study for final defence, a senior official or designate at each institution would have an opportunity to review the information pertaining to the institution for accuracy and for their satisfaction that no confidentiality was violated.

3.3.4 Identification of Informants

Once access to the organization had been gained, the next step was to identify what information sources would be utilized. The first source of information was a host of institutional documents which described current practice or prescribed standards for budgeting, accounting, and reporting. These documents were policy handbooks, memoranda, annual reports, directives which were generated internally, and directives from external sources such as the Department of Advanced Education or the Auditor General, and other printed material.

The second source of information was personnel within the institution. The initial contact for information was the senior administrative officer. An overall institutional perspective was provided and in two of the three cases, the researcher was assigned to work with managers reporting directly to the senior administrative officer. In the other case, the senior administrative officer chose to be the sole source of information, and if unfamiliar with certain details, would research the information and then provide it.

In all situations, there was ample opportunity to verify perceptions with other personnel. Each college provided that openness and allowed for internal sampling and to permit member checking of information. Different perceptions could be readily identified and clarified.

It should be noted, however, that the primary information sources in this study were personnel from the finance and administration divisions. No personnel from outside of those divisions, such as academic managers, were used as sources of data.

3.3.5 The Logistics of Data Collection

As was stated in the previous section, gaining access for a study of this nature can give rise to a host of sensitivities among potential subjects. The reason for the sensitivities was, in large part, the result of the study being financial in nature. All studies tend to create suspicions, but in times of restraint, financial studies are more vulnerable. No end of explaining can provide total assurance that the research interest was not in the numbers that appeared in the various accounts and that there was no interest in verifying the propriety of expenditures. A certain level of doubt can always exist in the minds of potential subjects.

In order to overcome such doubts, and they did exist with this study, it was necessary to build in techniques in the data collection process which would address those fears. The next section looks at the three major methods of data collection as well as the attempts which were made to retain the confidence of the subjects. In addition, special mention of the initial meeting between the researcher and the chief administrative officer must be made because it was this meeting that ensured that many of the anxieties could be minimized.

3.3.5.1 The Initial Meeting

Once access had been gained, an initial meeting was scheduled with the chief administrative officer of each participating college. Each meeting was designed to last between two and three hours and had four objectives to meet.

First, with two of the three colleges, this was the first time that the researcher and chief administrative officer had met. This was, therefore, an important "get-acquainted" meeting. It was also a time to reaffirm the purpose of the study and as well to emphasize the confidentiality of the information and to ensure that the college will not be identified by name, but rather only by a letter.

Second, it was a time to address a number of questions identified by Bogden and Biklen (1982:123). The meeting was an excellent opportunity to again re-affirm what was actually going to be done, and to describe the nature of the research output. It was also an opportunity to reaffirm that the study was descriptive and comparative, the data would be confidential, and the written description from each institution could be reviewed by the administrative officer or designate prior to it being included in the dissertation. The issue relating to what the institution would get out of the study was described. The benefits were three-fold and they were:

1. Each institution would have an opportunity to have their accounting, budgeting, and reporting procedure thoroughly described.
2. Each institution would have their practices compared to those of two other similar institutions in order that some insight into the uniformity of practice could be gained.
3. The study could stimulate further research which could enhance the development of further theory and practice in budgeting, accounting, and reporting.

The third purpose of the meeting was to gather as many pertinent documents and other materials that were of significance and that could be taken for the document review portion of the study which was done off-site. Among the documents which were made available were: policy handbooks, financial statements, annual reports, internal memoranda and directives, departmental directives, and internal budget documents and reports.

The fourth purpose of the meeting was to establish a tentative schedule for subsequent meetings. This task was not as simple and straight forward as it may seem. Due to conflicting schedules, the meeting schedules were very tentative to say the least. Changes had to be made quite often.

In conclusion, this meeting was an extremely important part of the data collection process. It helped to develop the confidence of the subject in the researcher and as well helped to build trust. To be successful it required two important attributes on the part of the researcher which were identified by Bogden and Biklen (1982). These were persistence and flexibility. This is not to say that the trust, once established, could be taken for granted. Nothing could be further from the truth. Throughout the study it was necessary to cultivate and maintain a level of trust to ensure continuation of the study.

3.3.5.2 Document Review and Analysis

As was indicated in the previous section, one purpose of the initial meeting was to identify the information which was necessary for the study, and as well to determine the sources of that information. One of the sources was the documents which were available from the organization. The most common document was the annual report which included the financial statements. The annual report from each organization contained a note to the financial statements which summarized the significant accounting policies and reporting practices which were utilized in the preparation of the statements. These reports proved to be an important source of information about the accounting and reporting practices at the colleges.

Another important document was the policy and procedures handbook. This was an internally prepared document. The content of these handbooks was useful in that it attempted to explain and/or describe some of the practices. One noteworthy aspect, however, was that the areas covered by the policies and procedures at one institution were not necessarily the same areas covered at another institution. Nonetheless, the document did provide useful information about particular practices.

The other documents that proved to be extremely useful were letters and memoranda which originated from internal or external personnel. Externally prepared documents often originated in the Department of Advanced Education. Included in these were the various reporting forms which were expected to be completed by all institutions. Various standards were implicit in the directions in how the forms should be completed. The documents often involved budget preparation standards, accounting standards and reporting standards. Other useful documents were internal budget documents and charts of accounts.

A content analysis was performed on all of the documents. The analysis involved two steps. First, the identification of a topic area was completed and, second, the policy or practice which was outlined was specified. A similar format was used for all institutions because it enhanced the comparison process and it also permitted constant comparison to take place.

It should be noted that the vast proportion of the document analysis was done off-site. The researcher was permitted to take documents or copies of documents off-campus and do the analysis away from the college which was being studied.

The document analysis proved to be very useful as a source of information pertaining to various aspects of budgeting, accounting, and reporting at the three institutions.

3.3.5.3 Observation

Observation was another method of data collection which was utilized. Although not as extensive as the other two methods, observation was carried out in a natural setting and the people being observed were fully aware that the process was going on. It was particularly useful in the study of the accounting and reporting aspects. With the accounting practice, observation was used to determine the journal entries which were developed for particular transactions. The entries indicated particular types of practices. With reporting, the observation approach was useful in determining how information was combined and consolidated for the various reports.

This approach was also useful in member checking of information which had been derived from the interview and the document analysis.

3.3.5.4 Interviews

The third method of data collection was the interview. An interview, according to Bogden and Biklen (1982:135), is "a purposeful conversation that is directed by one person in order to get information from a second person or from a group." According to the research design literature, an interview approach can very often be used in conjunction with observation and document analysis. That was indeed the case in this study.

The importance of the initial meeting cannot be over-emphasized in establishing a positive rapport for the interviews. That initial meeting allowed for relationship building and helped in establishing confidence and trust in the researcher which was a requirement in the interview process.

A total of four interview sessions were held at each institution not including the initial interview. The first two sessions tended to be of an unstructured nature. They generally served two purposes. The first was to clarify and gain some elaboration on the data which were collected from the review of documents. This was done largely by a questioning technique that related specifically to the information that had already been gathered. The interviews were unstructured in the sense that the particular questions asked were not necessarily common to all three institutions.

When all of the clarification was completed, the interviews took on a more structured format and this was common in all institutions to ensure that comparable issues were being researched. To this end, the interviewer had developed some questions that related to the following areas:

1. the users of accounting information;
2. environmental assumptions about the entity which were important in the development of the accounting, budgeting, and reporting systems;
3. the objective of accounting and reporting;
4. the structure of the accounting and reporting systems;
5. the basic underlying principles of the accounting system;
6. the basis of accounting which was used;
7. the funds which comprised the accounting system;
8. the types of accounting reports which were prepared;
9. the objectives of the reports;
10. the accounting and reporting standards which were utilized;
11. the internal reports which were generated in the institution;
12. the sources of operating standards in each of the areas being studied;
13. system interrelationships;
14. questions relating to how specific transactions were accounted for and reported; and
15. a description of the budgeting system.

Generally, the intention was to permit the interviewing to proceed from a general frame of reference to a more specific frame of reference. As the interviews became more specific, it was necessary to ask for examples and to paraphrase responses to ensure that the receiver was decoding the response in a manner intended by the sender.

The two general interview sessions tended to be from two to four hours in length. During the session, the interviewer made notes of the responses. At the end of each session the notes were reviewed for clarity and understanding, and were written out more completely.

After the second session some preliminary analysis of the data was conducted. Content analysis was used to assess the comparability of the information. Based on the information provided in the field notes, the document analysis, and the literature, an interview guide was developed. The guide is provided in Appendix I. The purpose of the guide was two-fold. First, it permitted the gathering of comparable information from all three institutions. Second, it permitted more structured questions to be used and it allowed the interviewer to get at more of the specific principles and procedures which were used in budgeting, accounting, and reporting.

Prior to the third interview session, the previously collected data which were relevant to the interview guide were recorded in the guide. The final two interview sessions were, therefore, devoted to seeking answers to the specific question on the guide. At the commencement of each session, however, the previously collected information, which had not been verified to the satisfaction of the researcher as being accurate, was checked with the interviewee by restatement of the question and by paraphrasing to ensure accuracy.

The third and fourth sessions lasted from three to five hours each. By the end of the fourth session all of the questions on the interview guide were reviewed and tested for accuracy.

The interview method was the primary method used for data collection. It served two purposes very well. It was an effective way to collect primary data. It also provided an excellent means of clarifying and member checking to ensure accuracy of the data which had been collected.

3.4 Analysis of Data

The three methods of data collection used in this study provided a tremendous amount of data. As a result, it was necessary during the course of the data collection process to carry out some analysis. This was required to maintain a focus which was consistent with the initial statement of the problem. Variation from the main focus could have resulted in the loss of trust by the interviewees, and consequently could have jeopardized the continuation of the study.

In addition to the analysis which occurred concurrently with the collection of the data, further analysis took place after all of the data had been collected.

3.4.1 Concurrent Analysis

The analysis which took place concurrently with the data collection process served three major purposes. First, it helped to narrow the study and also to maintain the main focus of the study. With the volume of printed information that existed in the documents, it would have been quite easy to expand the study to include such issues as internal control and internal audit practices, just to mention two. In addition, during the early interviews when the questions tended to be more general and were not too specifically defined, a great deal of information was collected which was peripheral to the problem statement.

As a result, analysis decisions were made throughout the data collection process. These decisions involved the areas that should be pursued further and those that should not. These decisions were made by the researcher in light of the original problem statement.

The second purpose of the concurrent analysis was to allow for planning of subsequent meetings and interview sessions which would take place. The data which had been gathered earlier served as a basis from which to proceed with further data collection. It was also in relation to this purpose that data which appeared to be extraneous to the main purpose of the study were discarded, and those data which appeared to be unclear were clarified during the member checking activity of subsequent interviews and observations.

The third purpose of the concurrent analysis was to provide a means of constructing an interview guide. The interview guide was used to assemble the information for each institution. The questions on the interview guide tended to be of two types. Some reflected perspectives held by the subjects regarding the basic philosophy underlying each of the systems, while others tended to reflect the methods used at each institution for accounting for different types of transactions as well as the institution's approaches to reporting and budgeting. The latter type of question tended to be of a more specific nature. The interview guide was a key in the analysis of the data at the end of the data collection process.

3.4.2 Final Analysis

The interview guide was a useful instrument which permitted constant comparison of the information. As a result, much of the analysis was completed at the same time as the data collection was completed. There was, however, still some analysis required. This involved the expansion of some categories in the interview guide and the collapsing of others, largely depending on the amount and the nature of the data collected. For example, the data in some categories were redundant with that in other categories. In those cases, one category was collapsed. In other categories, there was simply too much data, some which required a separate category. In that situation, new categories were constructed. This was accomplished by analyzing the content of the data using the recommendations provided by Bogden and Biklen (1982).

In accordance with Bogden and Biklen (1982:156), a coding system for the collected data was developed on the basis of regularities and patterns identified during the detailed review of transcripts. These regularities and patterns were described by words and phrases which became coding categories. Examples of codes which were developed were: setting codes, one for each college; and strategy codes reflecting particular methods of handling certain situations.

3.5 Establishing Trustworthiness

Within the conventional research paradigm, four questions about the research methodology and findings are of particular relevance. Do the findings demonstrate internal validity, do they demonstrate external validity, are the findings reliable, and are they objective? According to Lincoln and Guba (1985:290), in the conventional paradigm, internal validity is an indication or expression of the truth of the findings. External validity, on the other hand, is an indication of the applicability of the findings to other contexts. Reliability is a measure of the extent to which the same findings would occur if the study were replicated. Finally, objectivity is a measure of the extent to which the findings display the characteristics of neutrality. That is, the findings are determined by the subjects and the conditions in which the subjects are operating, and not by the biases and notions of the researcher.

In the qualitative paradigm, the same four characteristics of truth value, applicability, consistency and neutrality must be established in the findings in order to ensure trustworthiness. The measures that are used for each are respectively: credibility, transferability, dependability and neutrality. In this study, an attempt was made to establish trustworthiness. In the following sections, a description of the activities which were undertaken to meet the requirements of each criterion is provided.

3.5.1 Establishing Transferability

As described by Lincoln and Guba (1985), in qualitative research the researcher is not solely concerned with making decisions about whether the findings are transferable to other settings. Rather, the researcher strives to provide all the necessary data and information which will enable the user of the research findings to determine whether transfer of the findings to another context is possible. Providing of that enabling data and information to the user is termed "thick description" by Lincoln and Guba (1985).

An attempt was made to provide a thick description in this study. Included as components of the thick description was an explanation of the problem. This was provided in Chapter 1. In addition, a reasonably thorough description of the research setting was provided. The institutions used to gather the data are non-university, post-secondary institutions in the Province of Alberta. Within this description are the Alberta Vocational Colleges, the technical institutes, the special purpose colleges, the community colleges, and a number of private post-secondary colleges. It was stated that this study did not focus on the AVC's nor the private colleges. The institutions were therefore either technical institutes, special purpose colleges, community colleges or some combination of them. In order to protect the anonymity of the institutions studied, it is not possible to provide any further description.

The third element of thick description is what Lincoln and Guba (1985) call a thorough description of the transactions. In this study there was an attempt to provide descriptions of the basic assumptions underlying the accounting, budgeting, and reporting systems, the objectives which the systems tried to meet, the basic accounting principles, and the procedures or rules which were used. In addition, the budgeting and reporting systems were thoroughly described and the impact of accounting systems on the other two systems was clearly described. This was one of the key results from the study.

Finally, an in-depth description of the items of concern to the study was provided. Although the rough field notes were not provided as part of the study, a copy of the interview schedule is provided so that an overview of the data that were sought can be discerned with relative ease.

In conclusion, the transferability of the findings is one element of the trustworthiness of the findings. Even though the researcher may not be directly concerned with transferability, it is incumbent upon the researcher to provide sufficient and adequate information for the reader, who may be interested in transferability, to be able to decide whether that would be possible. The provision of a thick description is one way of ensuring the adequacy and sufficiency of the information, and that was the approach taken in this study.

3.5.2 Establishing Credibility

The credibility of the findings is a measure of the truth of the findings. As Lincoln and Guba (1985) explain, credibility is the extent to which a one-to-one isomorphism exists between the findings and reality. A number of techniques exist which can be used to improve the credibility of the findings. In this study four of these techniques were used.

The first technique was prolonged engagement. The researcher maintained contact with personnel from each of the organizations which were studied over an extended period of time. In addition, extensive meetings and interview sessions were held and their purpose was to collect data, build trust between the interviewer and the interviewee, and to test for incorrect, unclear, or misrepresented information. Incorrect perceptions were clarified during these sessions to ensure that the findings fairly represented reality.

The second technique which was used is termed triangulation. Three different methods were used to collect data. These were: document review, observation, and interview. These techniques were not only used to gather the data but also to verify and clarify findings. In addition to the different methods, different sources of information were used in two of the three organizations. Different personnel from the finance areas were used as sources of information and to clarify the information which was gathered.

The third technique which was used was negative case analysis. As the data collection progressed, variability or consistency in practice became more evident, hence, altering likely conclusions which would be drawn at the end of the research process.

The fourth technique which was used was that of member checking. During the course of the interviews, conclusions were tested with the interviewees to ensure that they represented reality. Also an interview session often commenced with the checking of the previous findings to ensure their trustworthiness. On a more formal level, each organization's key personnel were given the opportunity to review the written description of their practices to ensure credibility. Incorrect information was corrected to the satisfaction of the organization's personnel.

All of the above techniques were used to satisfy the truth value requirements of the findings. These four techniques represented four of the five which Lincoln and Guba (1985) suggested for establishing of the credibility of the findings.

3.5.3 Establishing Dependability

Dependability is a measure of the consistency of the findings. If the study were repeated, would the same findings be discovered? Lincoln and Guba (1985) suggested that one approach to establishing dependability is the use of "overlap methods." As described earlier, three methods were used to gather the data. These were document review, interview, and observation. Not only were these methods used to gather data, but they were also used to verify and clarify the findings. The use of more than one method of data collection contributes to the dependability of the findings. Findings uncovered by one method were verified and clarified by another method.

3.5.4 Establishing Confirmability

Confirmability is a measure of the extent to which the data and the findings are not the result of biases and perceptions of the researcher, but rather are determined by the subjects in their environment. In order to establish confirmability, Lincoln and Guba (1985) suggest that the triangulation technique be used. In this study as described earlier, different methods for collecting data and different sources were used. Both the different methods and sources served as a basis for data collection as well as for clarification and verification of the findings. In addition, the formal member checking of the written descriptions allowed for the confirmation of the findings. Further confirmation occurred when personnel from each of the institutions reviewed the final document.

3.6 Validity and Reliability of the Interview Guide

Two other types of validity were established for the study. The first was face validity of the interview guide. The questions in the interview guide related specifically to the accounting, reporting, and budgeting within the organizations which were studied. Borg and Gall (1983) identified this as a requirement for face validity. Content validity was also addressed. It was established by having an independent financial officer, one from a non-participating institution, ascertain the appropriateness of the questions used for assessing the current practices and to confirm that the questions related to accounting, budgeting, and reporting. That independent reviewer also attested to the reliability of the guide. His review helped to eliminate possible sources of ambiguity in the instrument.

3.7 Summary

In summary, the research methodology for this study was primarily analytic and multi-case study. The sources of information were observation, interviews, and review of official records and documents. The methodology also included a descriptive element. This pertained to the description of the practices which were used in the institutions that were studied.

The research was conducted in two major settings. The determination of accounting, budgeting, and reporting standards and practices by reviewing documents was done in an office or library setting. There was also a field research component. This related to the description of the current practices which was determined through observation and interviews on-site at the institutions which were studied.

There were three purposes for the research. One purpose was to provide a description of current accounting, budgeting, and reporting at the three colleges. Second, the comparison of current practices at the various institutions may lead to an identification of a common core of accounting, budgeting, and reporting practices in educational organizations. Third, variability and commonality in practices can lead to conclusions about the relationship between accounting, budgeting, and reporting, and the impact that accounting has on the latter two practices.

Chapter 4

BUDGET ADMINISTRATION PRACTICES AT THE SELECTED INSTITUTIONS

4.1 Introduction

This chapter provides an overview and description of the various accounting, budgeting and reporting practices used by the three post-secondary institutions which were studied. To protect the anonymity of the colleges, they are identified by a letter. The material presented is descriptive in nature and is based on the interview guide and field notes which were developed in the course of the study. The notes were based on interviews, observations and the review of documents.

Several topics are covered in this chapter. To begin with, a description of the information users is presented, as well as a description of their information needs. The basic assumptions which underlie the accounting, reporting and budgeting systems are also presented. The objectives, principles and accounting procedures are described, as are the objectives and standards for reporting. The accounting procedures provide an insight into the rules which were applied when accounting for the various asset, liability, fund balance, revenue and expenditure transactions. The discussion of reporting objectives and standards results in a thorough description of the types and nature of the reports which are generated. Also, a description of the budgeting practices and the cost accounting practices is provided. All of the descriptions are extensive, and they follow the same general format for each college.

4.2 Who are the Information Users?

The accounting information generated by an organization is usually used by a variety of users. Some are internal to the organization, while others are outsiders. Their individual needs may vary somewhat and, to some extent, reports may be tailored to meet certain individual needs. In other cases, the reports may be generic, and it is left to users to extract the information which they may require.

4.2.1 College 'A'

College 'A' had a total of six user groups for its financial information. The Department of Advanced Education was a prime user and received the annual report, the financial statements, as well as capital and operating budget reports. The Board of Governors was also a primary user. In addition to the information provided to the Department, the Board received quarterly financial reports as well as numerous budget-related reports. Senior management, the third user-group and the one which is also ultimately responsible for the preparation and circulation of all reports, received all internal and external reports. The divisional managers received monthly and quarterly expenditure reports for the programs within their divisions.

The fifth user-group was the ad hoc funding agencies and they received specific reports on projects in which they were involved. Examples of such agencies were the Canadian Job Strategies, and Alberta Vocational Training.

The annual report is a public document and was available to the general public on a request basis. A mailing list of interested parties, such as other institutions, was maintained and the annual report was provided to them on a regular basis. These groups, including the general public, constituted the sixth user group.

4.2.2 College 'B'

The audited financial statements which were part of the annual report were submitted to the Department of Advanced Education. Prior to that submission, however, the annual report was reviewed by the president, management and Board of Governors. It was also provided to other institutions, and was available to all staff and the general public on a request basis.

Expenditure reports were prepared on a monthly basis and were provided to the president, the management team and the Board. The expenditure reports were internal reports and were used for internal control purposes to ensure compliance with the approved budget.

4.2.3 College 'C'

The major information users at College 'C' were the Department of Advanced Education, the Board of Governors, other colleges, and the community at large. The information which was available to these groups is the annual report. The Department of Advanced Education, however, received specific reports such as capital requests, operating requests, and budget allocations.

Internal expenditure reports were also prepared. These were used by management as well as supervisors and served primarily an internal control function in relation to approved budgets.

4.3 The Information Needs of Users

According to the literature, the users of financial information have needs which are many and varied. The perception of what those needs are can vary from institution to institution. The following sections provide the list of user needs as identified through the interviews.

4.3.1 College 'A'

At institution 'A' a wide variety of user needs were perceived to exist. The following is a list of the needs that were identified:

1. to maintain a record of business transactions;
2. to provide information for planning and decision making;
3. to provide a basis for internal financial control;
4. to provide information for reporting;
5. to provide information for budgeting;
6. to provide information about required resource levels;
7. to demonstrate appropriate accountability and stewardship;
8. to evaluate managerial and organizational performance to the vice-presidential level;
9. to demonstrate financial viability;
10. to demonstrate the maintenance of generational equity;
11. to indicate the cost of services which have been provided; and

12. to evaluate the use of resources in the achievement of objectives.

Further elaboration on a number of needs was provided and is worthy of note. Historical information is particularly useful for budgeting in order that the use of a zero-based perspective can be avoided. Also, government grants were based on historical information. In terms of the appraisal of performance, financial information was used to assess the performance of the financial officers only. The last noteworthy point relates to generational equity. An attempt at demonstrating the maintenance of generational equity was the establishment of reserves which ensured the availability of funds for future projects and expenditures.

4.3.2 College 'B'

At College 'B' there was also a perception of a variety of user needs. Once again, the list provided on the interview guide served as a basis for identifying the needs. The list of needs was identical to that shown in the previous section, and for that reason is not provided again.

4.3.3 College 'C'

Major financial reviews were held at Institution 'C' at the six, nine and twelve month periods. These reviews were used to provide a basis for the evaluation of organizational performance. In addition to this need, the following user needs were identified in the interviews:

1. to maintain a record of business transactions;
2. to provide information for planning and decision making;

3. to provide information for reporting;
4. to provide information for budgeting;
5. to provide information to resource providers about required resource levels;
6. to demonstrate appropriate accountability and stewardship;
7. to provide information for evaluating managerial and organizational performance;
8. to demonstrate financial viability of the organization; and
9. to indicate the cost of the services provided.

4.4 The Assumptions Which Underlie the Accounting, Budgeting and Reporting Systems

The nature and the characteristics of the budgeting, accounting and reporting systems in an organization are, to a large degree, dependent on the assumptions that are held about the organization itself. The type of organization and where it is in its development can have an impact on its systems. The following sections describe the assumptions which were prevalent at each college.

4.4.1 College 'A'

At College 'A' the organization itself was viewed as an overall entity. However, within the entity were subentities which required differentiated treatment. For example, certain departments were allowed to generate and use revenue for the acquisition of capital assets. Other departments and units were denied such operational flexibility.

The social, political, and economic climates were seen as having an impact on the overall organization, but had only a limited impact on the financial information system. For example, the fifty percent reduction in the formula-driven capital grant did have an impact on operations, but the reduction did not necessitate changes to any financial system. Generally, it was felt that the social, political, and economic climate had little impact on the financial systems.

4.4.2 College 'B'

At College 'B', like at College 'A', the view which was held was that the entire organization was regarded as an entity. It was, however, recognized that differentiated accounting treatment must be provided for some of the funds. For example, some of the rules and procedures used in accounting for capital were different than those used in accounting for resources held on behalf of others.

The political, economic and social climate within the province was not viewed as a critical factor in the operation of the college. Four other factors were taken into consideration in the establishment of the financial information system. The first of these was the user-friendliness of the system. It was viewed that the information needs of the users must be met in a user-friendly manner. The second factor was the security control within the system. It was felt that users should not have to be concerned about their information being accessible to nonlegitimate users. The third factor considered was that of integration of the subsystems. It was necessary to integrate certain basic information that was common to the accounting, budgeting, and reporting systems. The overall financial system in place did not accomplish that goal well. As a result, it was necessary to use microcomputer based systems to provide the additional support. The final factor considered was that of reporting capability. With regard to this aspect, the needs of both the internal and external users were considered. The overall system seemed to have met the needs of the external users quite well, but micro-based enhancements had to be used to improve the reporting capability to internal users.

Generally speaking therefore, the political, economic, and social environment within which College 'B' was operating did not have a major impact on the financial information system in place. The establishment of the system seemed to be driven largely by the need to provide information to users in a manner that reflected the other premises mentioned above.

4.4.3 College 'C'

The view held at College 'C' was that the organization, as a whole, was viewed as the entity rather than as one composed of a number of entities. The latitude for the transfer of funds between the operating and capital funds did tend to influence that view of the institution at times.

With regard to the political, social, and economic environments, it was felt that sensitivity to the environments was both necessary and important. During a period of retrenchment, the environments had a tremendous influence on the organizational structure, and this could in turn influence the financial systems. In addition, factors such as budget guidelines were influenced, and greater emphasis was often placed on cash position.

4.5 The Objectives of Accounting

In determining the objectives of the accounting system, the participants were asked to identify what they viewed as the objectives of the system at their institution. Following are brief descriptions of their responses.

4.5.1 College 'A'

The objectives identified at College 'A' were quite specific. The accounting system was expected to generate cash flow records and it was also expected to provide a mechanism for monitoring receivables and payables. In addition, it was felt that information should be provided for operating and capital budgeting decisions, and for reporting as may be necessary.

4.5.2 College 'B'

The objectives of the accounting system at College 'B' were stated more generally. It was intended that the system would meet the information needs of users. The system should provide consistent and reliable information so that user needs could be met.

4.5.3 College 'C'

At College 'C', the objectives of the system were two-fold. The first objective was to communicate the results of past activity. An example of an attempt to meet that objective was the providing of information for the preparation of the statement of financial position. The second objective was to provide information for the preparation and communication of future plans. Budget submissions were an example of an attempt at meeting that objective.

4.6 The Accounting Principles

The accounting literature indicates that the rules and procedures that guide the practice of accounting are derived from basic principles. In order to establish which principles were utilized at each of the colleges, a checklist of principles was developed from the literature review. The respondents were given the opportunity to address the question of accounting principles generally, and then to elaborate on the principles which were underlying the rules and procedures that were used.

4.6.1 College 'A'

Eleven basic accounting principles were identified at College 'A'. These were: relevance, verifiability, consistency, comparability, materiality, disclosure, double-entry accounts, historical cost, reliability, communicability, and practicability. No additional principles other than the ones on the check-list were identified.

It is noteworthy that mention was made of one principle that was not being adequately adhered to. That principle was communicability, which included timeliness of information. The college used a batch system, and consequently it was often difficult to capture all of the required information at appropriate reporting intervals. As a result, the timeliness of the information was somewhat limited.

4.6.2 College 'B'

At College 'B', eight accounting principles were recognized as being significant to the development of the accounting procedures. These were: relevance, verifiability, comparability, double-entry accounts, historical cost, communicability and practicality. In addition to the above, the principle of accessibility was identified. The principle was noted as being important because it ensured that the information gathered by the accounting process did not simply remain in the accounting department, but it was reported on an as required basis to appropriate users.

4.6.3 College 'C'

At College 'C' ten accounting principles were reported as being significant to the development of accounting procedures. These were: relevance, verifiability, objectivity, consistency, comparability, materiality, double-entry, historical cost, reliability, and practicality. It was further noted that other principles could be of significance from time to time. The major source of these principles was GAAP (Generally Accepted Accounting Principles).

4.7 The Structure of the Accounting and Reporting Systems

The structure of the accounting and reporting systems referred to the basis on which expenditures were accounted for and reported. Three broad categories were reported in the literature, and they were the functional structure, the organizational structure and the object of expenditure structure. Following are brief descriptions of the structures that were found at each of the colleges which were studied.

4.7.1 College 'A'

For annual and comprehensive reporting, College 'A' used the functional structure. This means that expenditures were reported on a basis of major function, such as instruction, administration and student support. For internal purposes, on the other hand, reports were generated for each program and these program reports were rolled up into division reports. The information in these reports was categorized by object of expenditure.

4.7.2 College 'B'

Like College 'A', College 'B' used a functional structure for annual and other comprehensive reports. For internal reporting, the organizational approach was used to reflect program and departmental costs and specific items were then broken down into objects of expenditure. The accounting system itself was based on both the organizational and object of expenditure structures.

4.7.3 College 'C'

At College 'C' the basic accounting unit was the program and department. Expenditures were broken down into objects for internal reporting, but like at the other colleges, the annual report was done on a functional basis.

4.8 Fund Accounting

All three colleges used a fund accounting system. The number and types of funds could vary from year to year, depending upon the specific activities which they were engaged in. Following is a description of the various funds which were used at the colleges.

4.8.1 College 'A'

College 'A' had four major fund groups. These were: (1) the capital fund; (2) an ancillary services fund, which includes such operations as the bookstore; (3) an operating fund; and (4) a restricted fund. In the restricted category there was a custodial fund, which is used to account for "Funds Held On Behalf Of Others."

4.8.2 College 'B'

College 'B' also had four major fund categories. These were: (1) the operating fund; (2) a capital fund; (3) an ancillary fund, which also included the bookstore; and (4) a restricted fund in which the accounting for scholarship funds took place.

4.8.3 College 'C'

College 'C' used five major fund categories. These were: (1) a capital fund; (2) operating fund; (3) a restricted fund that includes an endowment subcategory; (4) a custodial fund for accounting for funds held on behalf of others and; (5) an ancillary fund. For reporting purposes, the custodial fund was rolled into the restricted fund.

4.9 Bases of Accounting

There are different bases for accounting identified in the literature. These bases refer largely to the process by which revenues and expenses are allocated to various accounting periods.

4.9.1 College 'A'

College 'A' utilized primarily a modified accrual basis. Revenues were accrued at fiscal year end. Revenues from services which have not yet been provided were held in a deferred revenue account, which was a liability account. Expenses, on the other hand, were accrued at fiscal year end on projects only. All other expenses were handled on a cash basis.

4.9.2 College 'B'

The basis used at College 'B' was described as accrual. All revenues and expenditures were accrued throughout the year. A deferred revenue account was used for all continuing education offerings. Tuition fees were accounted for as revenue after the courses were offered. Prepaid expense accounts were used to account for leases that had not lapsed.

4.9.3 College 'C'

At College 'C' a combination of the cash and accrual basis was used. During the year, all unpaid bills and salaries were accounted for on a cash basis, but they were accrued at the end of the fiscal year if they were still unpaid. Revenues were accrued at year end only, otherwise they were accounted for on a cash basis. Fee-for-service revenue was accrued on a monthly basis.

4.10 The Types of Statements Which Were Prepared

Organizations typically produce financial reports and generate other financial information for two primary users. There are the users who are external to the organization, and also those users who are internal to the organization. The types of statements, the number of different reports, and the frequency with which they are produced can vary from organization to organization.

4.10.1 College 'A'

At College 'A' a total of five statements were prepared. Some were dual purpose in that they met the needs of both internal and external users. Among these statements were the following: (1) Balance Sheet, (2) a Statement of Changes in Fund Balances, (3) a Statement of Equity in Capital Assets, (4) a Statement of Revenues, and (5) a Statement of Restricted Funds. It should be noted that all of these showed current year balances as well as the balances from the previous year, and as such, were comparative statements.

In addition to the five dual purpose statements, a series of internal expenditure reports were also generated on a regular basis. These reports were also comparative in nature, but instead of showing the previous year's activities for comparison, they showed expenditures to date in relation to the annual program budget. The purpose of these reports was largely to meet internal user needs.

4.10.2 College 'B'

College 'B' also prepared annual financial statements. Included in these statements were the following: (1) a Balance Sheet, (2) a Statement of Changes in Fund Balances, (3) a Statement of Changes in Equity in Capital Assets, and (4) a Statement of Revenues. In addition, the College prepared a more elaborate statement of current fund revenues and expenditures. This statement was not part of the annual report and was used primarily for internal purposes.

4.10.3 College 'C'

At College 'C', a total of five statements were prepared. These were: (1) a Balance Sheet, (2) a Statement of Changes in Fund Balance, (3) a Statement of Changes in Equity in Capital Assets, (4) a Statement of Reserves, and (5) a Statement of Restricted Funds. In addition, a series of expenditure reports were provided for internal purposes on a regular basis.

4.11 The Composition of the Annual Report

The literature provides a variety of different recommendations as to what information could appropriately be provided in the annual report. It is important at this point to draw a distinction between an annual report and annual financial statements. For the purposes of this study, the financial section of the annual report is comprised of the financial statements discussed in the previous section. The annual report is therefore, a far more comprehensive document than are the financial statements alone. All public post-secondary institutions in

Alberta are required to prepare an annual report. This is a public document and is available to any member of the the public who may have an interest in seeing it.

4.11.1 College 'A'

The annual report prepared at College 'A' contained a letter of transmittal as well as an introductory statement from the President. Also presented was a mission statement for the college. A complete financial section with notes and schedules was provided along with an auditor's report.

The auditor's report was a legal requirement and was designed to issue an opinion on the fairness of the presentation of the financial statements as well as the conformity of the financial statements with generally accepted accounting principles. Also, the report sometimes issued an opinion on the economy and efficiency of the operations, and on the compliance of the operations with legal requirements and constraints.

It should be noted that individual financial reports were prepared for each of the funds listed earlier. They were presented in combined form in the financial section of the annual report. The previous year's statements were also provided for comparative purposes.

The annual report also contained a statistical section. Enrollment and staffing data were provided in this section. In addition, unit cost information based on credit hours, and courses, student registration and full-time equivalencies was provided.

A footnotes section was provided and it included a summary of the accounting policies which were used. An organizational chart was provided, as was a Schedule of Funds Held On Behalf Of Others.

4.11.2 College 'B'

In addition to the financial statements which were presented in the annual report, other information was also presented in the annual report prepared by College 'B'. The annual report was accompanied by a letter of transmittal which was signed by the President. There were also individual divisional reports which provided a summary of activities in the particular divisions. Enrollment activity was also reported. In addition, a report from the Auditor General was contained in the annual report.

The auditor's report was believed to provide three assurances. It confirmed that the statements provided a fair presentation of the financial affairs of the organization, that they had been prepared in compliance with generally accepted accounting principles, and that other legal requirements and conditions were adequately met. In addition, the auditor's report sometimes provided an insight into the economy and efficiency of operations. The auditor's report was provided in conjunction with the financial statements discussed in the previous section.

The annual report also had a section containing footnotes and schedules. In this section there was a summary of the accounting policies which were used in the preparation of the accounting reports, and all significant legal and contractual obligations were stated.

4.11.3 College 'C'

The annual report prepared by College 'C' contained a number of sections. There was a complete financial section accompanied by a letter from the Auditor General. The statements in the financial section were identical to the annual financial statements prepared for external users and which were discussed in the previous section.

In addition, the annual report contained a mission statement which was accompanied with a letter of transmittal. A statistical section and footnotes also appeared in the annual report.

The auditor's report served to provide an insight into four main issues. The report confirmed that the financial statements complied with generally accepted accounting principles, and with legal requirements and restrictions. Sometimes the report provided an indication of the effectiveness of programs as well as the economy and efficiency of overall operations.

The footnotes section provided three different pieces of information. First, there is a summary of accounting policies which were used. All contingent liabilities, if any existed, and other legal and contractual obligations were included. Second, statistical tables with data to highlight various aspects of organizational operations were provided. Finally, any interfund borrowing was described.

4.12 The Objectives and Standards for Reporting

In many organizations, the accounting and the reporting standards are one and the same thing. It is possible for an organization to generate reports and yet not have an adequate accounting system in place. Likewise, it is possible to have an accounting system but not report on a systematic basis. Due to these possible circumstances, it is necessary in a study such as this to determine what objectives and standards exist specifically for the reporting activities.

4.12.1 College 'A'

In addition to the accounting objectives already discussed, one reporting objective was worthy of mention. It pertained specifically to the reports which were generated and were not directly related to the accounting objectives. According to this objective, the reports should contain information which was clearly presented, was understandable and timely, and was consistent with previous reports. This objective indicated a fairly explicit concern for the needs of the user.

In addition to the objective stated in the previous paragraph, at College 'A' the following were identified:

1. to demonstrate propriety and compliance;
2. to provide information about effort, costs, and accomplishments;
3. to show the sources and uses of resources;

4. to provide information about changes in financial condition and obligations of the entity;
5. to provide information about the restrictions placed on financial resources;
6. to facilitate evaluation;
7. to display the state of the finances;
8. to provide reliable information which was relevant to the needs of the users;
9. to demonstrate accountability;
10. to provide information about the organization's financial position; and
11. to provide information that could be used to evaluate the ability of the college to finance activities and meet obligations, both short-term and long-term.

4.12.2 College 'B'

College 'B' attempted to meet a number of objectives through its reporting system. The specific objectives which were identified are listed below, along with the specific reports which were designed to meet those objectives:

1. to demonstrate propriety and compliance - all Board level reports;
2. to provide information about costs, efforts and accomplishments - all reports;
3. to show the sources and uses of resources - all except the cost centre expenditure reports;
4. to provide information about financial condition and obligations of the organization - all Board level reports and the annual report;

5. to provide information about restrictions which were placed on resources - senior management and Board level reports;
6. to facilitate evaluation - annual report and Board level reports;
7. to indicate the state of the finances - all reports;
8. to provide reliable information which was relevant to the needs of the users - all reports;
9. to demonstrate accountability - all reports;
10. to account for sources, users and allocation of resources - all reports; and
11. to provide information about the college's financial condition - all reports.

The above list is a comprehensive list of objectives that College 'B' attempted to meet through its reporting system.

4.12.3 College 'C'

College 'C' also attempted to meet a number of objectives through its reporting. Following is the list of objectives for this college:

1. to demonstrate propriety and compliance;
2. to provide information about efforts, cost and accomplishments;
3. to indicate the state of the organization's finances;
4. to provide reliable information which was relevant to the needs of users;
5. to demonstrate accountability; and
6. to provide information about the organization's ability to finance its activities and meet its obligations.

It is noteworthy that the view at College 'C' was that all of the reports which are generated should meet the above objectives.

4.13 The Comprehensiveness of the Reports

Organizations can provide separate statements for all accounting entities. On the other hand, they can do some combination of the reports for the various entities, or they could consolidate all of the entities and do a consolidated statement. Such variability, according to the literature, is possible.

4.13.1 College 'A'

At College 'A' the subfund categories were typically combined into one report for the fund. Further disclosure in the footnotes may occur. The entities for which separate reports were prepared are the four major fund categories. These were: the capital fund, ancillary services fund, the operating fund, and the restricted fund. No further combination occurred.

4.13.2 College 'B'

College 'B', like College 'A', provided combined statements. They combined the various subfund groups into a fund report. Each of the four major funds, namely the operating fund, the ancillary fund, the capital fund, and the restricted fund were reported separately.

4.13.3 College 'C'

At College 'C' five major funds were reported. These were: the capital fund, the operating fund, the restricted fund, the endowment fund, and the custodial fund. In addition separate statements were prepared for ad hoc entities. For annual reporting purposes, these statements were combined into the appropriate fund statement, but they were also available on an individual basis because the funding sources, such as Canadian Job Strategies and Alberta Vocational Training, required that they be prepared.

4.14 The Internal Reporting Practices

Often in a discussion of financial reporting, the emphasis tends to relate to the needs of users who are external to the organization. However, internal users also have financial information needs, and they are dependent upon the finance department to prepare such information for them. The following sections deal with the internal reports which were prepared to meet the needs of these users.

4.14.1 College 'A'

At College 'A', interim, quarterly financial statements were prepared. These statements were made available to senior management. In addition, monthly expenditure and revenue reports were prepared for each of the operating divisions. These reports were prepared for the deans, who then decided if they would forward them to their budget centre managers. These reports provided no comparison to prior years' activity, although the current year's budget was provided for comparison with actual activity.

4.14.2 College 'B'

At College 'B', the President received a monthly expenditure report and a budget report. The directors received more detailed cost centre reports as well as an expenditure report for the capital fund. Both the capital report and the cost centre expenditure reports were provided with the current year's budget to which comparisons with actual results could be made. The directors, typically, forwarded the cost centre reports to their appropriate program heads. Revenues were reported on only profit centre reports. An example of a profit centre was the continuing education department. Senior management also received operating reports for ancillary enterprises.

4.14.3 College 'C'

The practice at College 'C' was to prepare and provide a separate budget report for each department head at, or near, the beginning of the fiscal year. This report was followed up by monthly expenditure reports which could be used for analysis and comparison to the budget. In addition, internal reports were prepared on ad hoc activities. A monthly income statement was prepared for each of the ancillary enterprises. Also, a number of other reports were prepared. Among these were: a report on the aging of accounts receivables; a variety of inventory reports; and a summary of activity in the restricted accounts.

In addition, interim financial statements were prepared six months, and also nine months into each fiscal year. These interim reports were internal documents for management purposes only. They were designed to highlight areas where remedial action should take place, and occasionally they resulted in budget reallocation.

4.15 Budgeting

Budgeting is an absolutely critical activity for educational organizations at the post-secondary level. Not only is the budget an important document which outlined the financial course for the coming year, it was also required by the Department of Advanced Education. Like with accounting and reporting, however, there were a number of approaches to the budgeting process at the colleges which were studied.

4.15.1 College 'A'

The budgeting process at College 'A' was in the state of transition because an important change was occurring. That change was the development of academic and operating plans which were designed to drive the budgeting process. Prior to the plans being developed, however, planning guidelines were provided by senior management. The planning guidelines tended to be incremental in nature, and the increment tended to be based on the previous budget rather than on the previous actual expenditures. The purpose of the guidelines was to prevent managers from developing unrealistic plans which would be impossible to fund. The guidelines served as parameters within which the planning occurred.

The incremental process needs further description. Not all programs or divisions necessarily counted on the same incremental increase. Internal shifts within divisions could be made. In addition, interdivisional shifts could also be made by senior management.

For ongoing, established programs, the process could be described as a "top-down" process. Budget centre managers were not involved in budgeting, but rather were involved in budget allocation only. There was some speculation that the development of academic plans may have a greater impact on budgeting. At present, however, budget decisions were made at senior levels and were provided to budget centre managers.

When new programs were launched, a program budgeting system was used. The cost factors used in the development of a new program budget were the personnel; equipment, materials, and supplies, and in some instances, particularly with off-campus offerings, facility costs were used. The budget requests were reviewed by senior management and the decision of whether to approve or alter the request was made on the basis of a number of criteria, one being per student cost.

4.15.2 College 'B'

The budgeting process at College 'B' commenced with the setting of institutional priorities and parameters and the development of budget assumptions. These were set by the management team and were largely financial in nature. The parameters tended to be based on the incremental model. Once these guidelines were set, budget requests were generated at the program level and were based upon program goals and priorities. These program requests were forwarded to the departmental level. At that level, the requests were sometimes redefined and interprogram reallocation could take place, based on the priorities at the departmental level. The departmental requests were then forwarded to the management council which included divisional directors. At this level, reallocation also sometimes occurred. This was largely dependent on the consistency of the departmental priorities with institutional priorities. Once management council approved the budget, the overall institutional request was forwarded to the Board of Governors for its approval or possible modification.

In determining the cost components for the budget, a number of factors were considered. As in all educational organizations, personnel costs were an important budget factor because they accounted for a large proportion of the total expenditure. Facility costs were generally not budgeted for in the regular departmental operating budgets because a separate facilities budget was maintained. Equipment rentals and material costs were included in the base program budget if they were integral to the program. If they were not integral to the program, they were included in a central equipment and materials budget.

An exception to this practice was in the budgeting which occurred for ad hoc programs, particularly those which were offered off-campus. For those programs, facility costs were included in the program budget. Also, all material and equipment costs were budgeted as part of the program budget. With ad hoc programs a greater attempt was made to capture indirect costs. In addition, continuing education courses were considered as individual profit centres, and as a result, the budgeting for these courses tended to be similar to that used for ad hoc programs.

4.15.3 College 'C'

At College' C', an important player in the budgeting process was the finance committee, which comprised management, directors, and coordinators. This committee reviewed the requests and input from program areas and set institutional priorities. It also established the budget guidelines and parameters within which the budget requests were established. The budget was set at the budget committee level after receiving input from the budget centres. Final approval of the Board of Governors was necessary.

In determining the budget, three factors were taken into consideration. These were personnel, facilities, and equipment and materials. In some circumstances, other direct costs and some indirect costs were appropriately included in the budgeting process. This was particularly true for ad hoc funded programs.

4.16 The Sources of Standards

There are usually a number of alternate ways of treating particular transactions. In order to have a certain consistency in treatment, it is necessary to develop standards. Usually financial system managers can draw on a number of sources which can be helpful in establishing the standards which are to be used in their organization.

4.16.1 College A"

College 'A' identified six sources of accounting standards. One important source was, of course, the CICA Handbook. Although the emphasis in this source tended to be on the commercial enterprise, it was still an important guideline from which specific standards were derived. Another important source, and one that is more closely connected to the post-secondary institution needs, was the CAUBO (Canadian Association of University Business Officers) Handbook. This handbook was specifically designed to address the accounting and reporting needs of colleges and universities. A third source was the Alberta Department of Advanced Education which also prescribed various accounting and reporting standards. This was particularly evident in the accounting for capital items. A fourth source was the Provincial Auditor General. That office, through its annual audit of colleges, prescribed the accounting treatment for various types of transactions. A fifth source was the Committee of Senior Business Officers from the public colleges in Alberta. Through discussion and communication among senior business officers and senior accounting officers from the post-secondary sector in Alberta, some standards were clarified or developed. The groups met separately at various times each year and information on standards was shared. A final source was the policy setting within the college itself. Standards for the accounting treatment of transactions unique to the college were established by developing a specific accounting policy within the college.

4.16.2 College 'B'

At College 'B' four major sources of accounting and reporting standards were identified. The first source was the CICA Handbook. The second and more appropriate source was the CAUBO Handbook.

The standards in this source were more specific to the college setting. The third source was the Auditor General's office. Through its annual audits, standards for certain types of transactions and activities were prescribed. The fourth source was other business officers. Consensus on specific accounting standards was often reached at regular meetings of those officers, or in individual consultation with other officers.

4.16.3 College 'C'

The accounting standards used at College 'C' were derived, in large part, from four sources. The first source which was identified was Alberta Advanced Education. The second source was the CICA Handbook. The third was the CAUBO Handbook. Finally, the committee of senior business officers from the public colleges and the subcommittee of accounting officers were an important source of standards.

4.17 System Interrelationships

The budgeting, accounting and reporting systems can be operated independently of each other, or they can be totally integrated. These interrelationships can be the result of habit and historical practice, or they can be deliberately established. The following section deals with the system interrelationships at each of the institutions which were studied.

4.17.1 College 'A'

The first system to be activated at College 'A' was the budgeting system. No transactions could be processed until revenue and expenditure codes were established, and no codes were established until a budget was set up and approved. The budget approval, therefore, triggered the receipt of revenues, the occurrence of expenditures, and thus, the accounting process. The accounting system, on the other hand, provided information for the development of budgets as well as for the preparation of reports. Some reports were derived directly from the budgeting system. These were the operating and capital budget reports. Other reports included accounting and budgeting information together, often to allow for comparison. From the above discussion, it was obvious that the three systems at College 'A' were interrelated and to some extent integrated.

4.17.2 College 'B'

College 'B' had a fully integrated system. Once the budgets were approved and entered on the computerized system, the accounting entries automatically got matched to the appropriate budget item. The system also generated reports automatically, many of which contained both budget and accounting information for comparison.

4.17.3 College 'C'

At College 'C', budgeting was seen largely as a planning function. Accounting, on the other hand, was carried out to facilitate internal control, reporting, and as well as, a management consulting role. The reporting system drew information from both the budgeting system as well as the accounting system. Likewise, the budgeting system drew heavily on previous periods' accounting information to provide a basis for future planning.

4.18 Accounting Standards

The following sections provide a detailed description of the accounting procedures which were used to deal with specific types of transactions at each of the colleges in the study.

4.18.1 The Use of Subsidiary Ledgers

4.18.1.1 College 'A'

College 'A' used seven types of subsidiary ledgers related to specific control accounts in the general ledger. These ledgers were: the accounts receivable ledger; the accounts payable ledger; the restricted funds ledger; inventory ledgers for capital, accountable supplies, buildings, learning resource centre materials, leasehold costs, and land; a deferred income ledger; and separate ledgers for reserves and unexpended capital.

4.18.1.2 College 'B'

College 'B' retained four subsidiary ledgers. They were: an accounts receivable ledger; an accounts payable ledgers; a fixed assets (Plant) ledger; and a payroll register.

4.18.1.3 College 'C'

College 'C' maintained four subsidiary ledgers in its system. They were: a fixed assets ledger; an accounts receivable ledger; an accounts payable ledger; and a work order ledger for major repairs and renovations.

4.18.2 Accounting for Cash and Investments

4.18.2.1 College 'A'

College 'A' maintained three bank accounts, namely a payroll account, a general account and a U.S.A. currency account. The general account contained all cash including restricted fund cash. Idle cash was invested in term deposits and treasury bills. All investments were of a guaranteed return nature unless otherwise approved by the Board of Governors. The pooling of investments occurred and earned interest was prorated back to the appropriate cash accounts. Investments were valued at their principal amounts.

4.18.2.2 College 'B'

College 'B' maintained five separate bank accounts, and they were a general account, a payroll account, a U.S. account, a capital account and a restricted fund account. Each major fund except the ancillary services fund had its own cash account in the general ledger. There was no written policy in place for dealing with idle cash, nor was there a written policy defining which opportunities for investment were available to the college. The unwritten rule in this regard was that the investments must be restricted to C.D.I.C. insured instruments offered by chartered banks, and treasury bills. Interest on investments was accrued monthly and reported on the same basis. Typically, term deposits were the most common investment instrument for short-term periods. The college also did not have written policies pertaining to the pooling of investments.

4.18.2.3 College 'C'

At College 'C' the practice was to retain all cash in one major bank account. There were a number of small bank accounts for specific purposes.

Idle cash was invested. There was a written policy which required that surplus cash be invested in interest-bearing, guaranteed investments such as term deposits. No equity investments were permitted. College policy allowed for pooling of investments to ascertain better rates of return. Interest revenues were recognized and were then pro-rated back to the appropriate funds at year end. To ensure appropriate record keeping an investment register was maintained.

4.18.3 Accounting Related to Fund Development Activities

With the current financial restraint and the concomitant inability of governments to provide the level of funding required by educational institutions, colleges have been encouraged to utilize creative fund development to generate the additional funds which they require. Essentially two alternatives have been pursued by colleges. The first was to establish a fund development office which is part of the organizational structure of the college. The second was to establish an independent entity, an organization referred to as a foundation, whose sole purpose was to generate funds.

4.18.3.1 College 'A'

College 'A' had an established foundation and consequently all fund development activities were carried out and accounted for by that entity. The college only accounted for cash transfers from the foundation into college accounts.

4.18.3.2 College 'B'

College 'B' accounted for its fund development activities directly. Donations were recognized at the time that they were received. An example of the journal entry for a donation is the following:

Cash or fixed asset	xxx	
Donation		xxx

The donation account was part of the revenue section. It should be noted that the value of nonliquid items was established by independent appraisal prior to the recording of any accounting transactions.

4.18.3.3 College 'C'

College 'C' opted for the second alternative and established a foundation for fund development purposes. As a result, the accounting for gifts, pledges, and other donations was done by the foundation. Cash, once accumulated, was transferred from the foundation to the College. The transfer could be made to college revenue directly from the foundation, or it could be transferred to college revenue via a restricted account if there were restrictions placed on the use of the funds by the donor.

4.18.4 Accounting for Receivables

Since most colleges used a form of accrual accounting, it was conceivable that they recognized revenue in advance of the receipt of cash. That resulted in the need to establish an accounts receivable account. The following sections elaborate on the types of receivables that existed at each of the institutions which were studied.

4.18.4.1 College 'A'

College 'A' recognized various types of receivables. Among the more common ones were late tuition fees, pending payments on international projects, and pending payments on contracted services which had been delivered. The debit entry was to the accounts receivable account and credit entry was to the appropriate revenue account, such as the tuition fee revenue account. An example of a journal entry is the following:

Accounts Receivable	xxx	
Tuition Fee Revenue		xxx

4.18.4.2 College 'B'

College 'B' used the accrual basis of accounting, and as such, had occasion to recognize revenue prior to the receipt of cash. This led to the need for an accounts receivable account. There were essentially two sources of receivables. These were tuition fees, particularly those payable by third parties, and also receivables from contracts for industry based training which had been completed. The typical journal entry was a debit to the accounts receivable account and a credit to the appropriate revenue account. The following is an example of an entry:

Accounts Receivable	xxx	
Industry Training Revenue		xxx

4.18.4.3 College 'C'

College 'C' also had an accounts receivable asset account. The account was tied very closely to the billing system, which ensured that the appropriate invoicing took place. A major source of receivables was contracts for the delivery of programs tailored to meet specific needs, usually industry needs. NSF cheques were also set up as receivables. The usual journal entry for any such transaction was a debit to the accounts receivable account and a credit to the appropriate revenue account.

4.18.5 Accounting for Inventories

Inventories in post-secondary institutions were usually stocks of supplies that were used in the day-to-day operation of the institution. They were paid for from an operating account and would include those items whose unit cost was less than five hundred dollars and who had an economic service potential of less than one year. There were a number of accounting treatments for items that fit this category.

4.18.5.1 College 'A'

College 'A' had two classes of operational supplies. Those items which individually cost less than one hundred dollars were expensed at the time of purchase, and as a result, no inventory record of them was maintained. A typical journal entry for this type of item was:

Supplies Expenditure	xxx	
Cash		xxx

The second category of supplies was those items which individually ranged in price between one hundred dollars and five hundred dollars. These items were also expensed at the time of purchase for financial statement purposes. However, an inventory record of these items was maintained for security reasons.

4.18.5.2 College 'B'

College 'B' did not use a particular inventory valuation system. Supply items were expensed at the time of acquisition and no inventory or record of the items was maintained.

4.18.5.3 College 'C'

College 'C' maintained two types of supplies. One type was termed expendables and cost less than one hundred dollars per unit. These items were expensed at the time of purchase. The journal entry for a purchase transaction was a debit to the appropriate supplies expense account and a credit to cash. The second type of supply was termed "accountable supplies" and ranged in unit price between one hundred dollars and five hundred dollars. These items were also expensed at the time of acquisition for balance sheet purposes, but an inventory was maintained for internal control purposes. The inventory value was the historical cost of the individual items.

4.18.6 Accounting for Prepaid Expenses

An example of a prepaid expense was insurance coverage. Insurance policies were paid for in one year, but the coverage may extend for a full year into the future. The unexpired coverage constitutes an asset for the institution and could be accounted for as such, or the cost of the policy could be expensed at the time that it was purchased.

4.18.6.1 College 'A'

College 'A' accounted for prepaid expenses on an accrual basis. The accruals occurred monthly. To ensure that the appropriate accruals were made, a subsidiary ledger of prepaid expenses was maintained and the appropriate adjustments were made monthly.

4.18.6.2 College 'B'

College 'B' set up prepaid expense accounts for various items. The three most common ones were: insurance, taxes, and leases on equipment. The appropriate expense charges were accrued on a monthly basis. An example of a journal entry for insurance expense, in this case, was the following:

Insurance Expense	xxx	
Prepaid Expense		xxx

4.18.6.3 College 'C'

College 'C' had a variety of prepaid expenses. The accrual of the appropriate expense charges occurred at the end of the fiscal year as an adjustment. Thus, the prepaid expense was established when the item was acquired and the asset account remained untouched until year end. At that time, the used up portion of the asset was credited to the asset account and the offsetting entry was a debit to the appropriate expense account.

4.18.7 Accounting for Fixed Assets

Fixed assets, usually termed capital assets, were those items which had an economic service potential which was greater than one year. A second stipulation for post-secondary institutions in Alberta was that the cost of the individual items should be in excess of five hundred dollars. The literature indicated that there are a variety of accounting treatments that may be applied to capital assets.

4.18.7.1 College 'A'

Fixed assets were those items with an individual value in excess of five hundred dollars. At College 'A', capital assets were accounted for in the capital fund and included such items as land, buildings, furniture and equipment whose individual values were greater than five hundred dollars, leaseholds, and certain LRC materials. Typically fixed assets were recorded at a historical cost. Buildings included both historical cost and other related acquisition costs. Learning resources centre materials often did not fit the value category for capital. They were capitalized at the end of the fiscal year and were maintained on the financial statements. Also, an inventory of these assets was maintained.

Some classes of capital items were not maintained at historical cost. These were typically items which had been donated and their historical cost was unknown or difficult to establish. Such items were recorded at estimated value for insurance purposes and for financial purposes the value was equal to the matching grant. If no matching grant was received, then the asset was recorded at estimated value.

The cost of major repairs to buildings was added to the cost of the building. Repairs to furniture and equipment, on the other hand, were expensed at the time which they were completed. The journal entry was a debit to operating expense and a credit to cash as shown below.

Operating Expense	xxx	
Cash		xxx

Renovations to buildings could be capitalized, or they could be expensed. The determining factor was whether or not the renovation resulted in an increase in floor area for the building. If there was an increase in area, then the renovation was capitalized at the end of the year. If there was no increase, then the renovation was expensed through the capital fund.

Capital lease agreements were not capitalized. The lease payments were expensed at the time that they were paid.

Library holdings were maintained as capital inventory. They were valued at the sum of the value of the material and value of any related acquisition costs. Any additional costs such as those involved in cataloguing were not added to the value. The journal entry to show the acquisition of a library holding was a debit to LRC material and a credit to cash, as follows:

LRC Material	xxx	
Cash		xxx

As far as the disposal of fixed assets was concerned, a record of all surplus items which were disposed of was maintained. The accounting for these transactions was done annually.

4.18.7.2 College 'B'

At College 'B' all fixed assets appeared in the capital fund. There were four major classes of capital assets. These were: land, buildings, furniture and equipment including computer software, and vehicles. Library holdings, leaseholds, and leasehold improvements were not considered to be capital and were expensed on a periodic basis. Library holdings, for example, were expensed for financial statement purposes at the time of purchase, but an inventory of these items was maintained. Lease agreements were not accounted for in the capital fund. They were maintained as contractual obligations and the periodic payments were expensed when they were made.

All fixed assets were capitalized at historical cost. The historical cost included the cost of the item and all other related costs. These assets were not depreciated and were not written down until a disposition occurred. No fixed assets were capitalized at market value and none were expensed at the time of acquisition.

Repairs could either be capitalized and their value added to the cost of the asset, or they could be expensed and charged to operations. The determining factor was the cost of the repair. Major repairs, which were those whose cost was in excess of five hundred dollars, were capitalized. Repairs not classified as major were expensed.

The accounting treatment for renovations was the same as that for repairs. Major renovations, which were those costing more than five hundred dollars, were capitalized and their value was added to the cost of the assets. This capitalization occurred at the completion of the renovation. Minor renovations were expensed.

Surplus assets were accounted for at the time that they were disposed. Because capital assets were maintained at historical cost and not depreciated, a loss on sale usually had to be declared. For example, if an item cost two thousand dollars and was sold for eight hundred dollars, a loss on sale of twelve hundred dollars was declared. The resulting journal entry was as follows:

Cash	800	
Loss on Sale	1200	
Fixed Asset		2000

The loss was charged to operations.

4.18.7.3 College 'C'

The accounting policy at College 'C' required that all fixed assets be accounted for in the capital fund. Four classes of fixed assets were recognized. They were: land, buildings, furniture and equipment. Library holdings were not recognized as fixed assets. Rather they were expensed at the time of acquisition for financial reporting purposes, but a separate inventory of the holdings was maintained. No leasehold improvements existed.

For accounting purposes, fixed assets were defined as those assets whose individual acquisition cost was in excess of five hundred dollars. These items were capitalized at historical cost at the time of acquisition. For internal information purposes, those assets whose individual acquisition cost was in the range between one hundred dollars and five hundred dollars were inventoried, but they were not reported on the balance sheet. It is worth noting that the historical cost basis for fixed assets had only been in place since 1986. Prior to 1986, the appraised-value basis was used.

Also, all those assets whose individual acquisition costs were in excess of one hundred dollars were maintained in a subsidiary ledger. The ledger showed the location of the asset, its purchase order number, supplier, date of purchase, and its college tag number. A reconciliation between the fixed asset subsidiary ledger and the fixed asset general ledger account was prepared regularly.

Fixed assets were not depreciated and there was no write-up in value to reflect price increases. All assets were held at historical cost until they were disposed.

All repairs to fixed assets were treated as operating expenses and, as such, were expensed at the time that the repair was completed. Renovations, on the other hand, were either expensed or in some instances they were capitalized. The guiding principle with renovations was whether the square footage of the space had been extended. If the square footage was not extended as a result of renovation, then the renovation was expensed at the time of completion. If the square footage was extended, then the renovation was capitalized. Capitalized renovations were further identified by written statements provided by engineers and architects which verified the extension of the area.

Fixed assets were maintained in the records until they were disposed. When disposal occurred, the items were removed from the records and the net proceeds were credited to the capital revenue account. Losses on sale were charged against operations in the year in which the disposal occurred.

4.18.8 Accounting for Intangible Assets

Intangible assets are those items which are of value to the organization which owns them, but which do not have a physical existence. Examples of intangible assets are goodwill, patents, and copyrights, to mention a few. Commercial accounting begrudgingly acknowledges the existence of intangible assets and principles for dealing with them have been developed, albeit slowly. The following sections explain the accounting for such items by some public colleges.

4.18.8.1 College 'A'

At the time of the study College 'A' had no intangible assets which it recognized. An emerging issue was that of copyright. No accounting principles, however, had been developed for dealing with copyright. It was felt that the value of the asset would probably be equated to the direct development costs and if there were a decision to capitalize, it would occur at that cost.

4.18.8.2 College 'B'

College 'B' did not account for any intangible assets. The closest asset to be intangible was copyright. It was not accounted for on developed materials. When copyright was purchased, on the other hand, it was expensed at the time of acquisition through a copyright expense account.

4.18.8.3 College 'C'

College 'C' did not account for intangible assets. Any copyrighted instructional material in possession of the college was expensed at the time of acquisition.

4.18.9 Accounting for Liabilities

Educational organizations, like most other organizations, acquire liabilities. College liabilities could be of various types. According to the literature, the most common types are: accounts payable, long-term debt, deferred revenue, compensated absences, contractual obligations, and pension costs. Compensated absences were a relatively new concept and related to such issues as vacation which employees had earned but not taken. Credit towards sabbatical or educational leave was another example. Both of these issues could be critical if a cash payout should be necessary at some future time.

An accounting issue which is related to liabilities is that of encumbrances. Liabilities are normally recognized in accrual accounting at the time that the service is rendered. Encumbrances, on the other hand, are potential commitments against cash, but the recognition of them can provide a clearer picture of future cash outflows.

The following sections will deal with the accounting practices used in dealing with liabilities at the colleges which were studied.

4.18.9.1 College 'A'

College 'A' had no long-term debt and, therefore, it had no accounting practice for dealing with that type of liability. It did, however, have accounts payable and deferred revenues.

Accounts payable were handled on a cash basis throughout the year. Any payables that were carried over into the new fiscal year were accrued and carried as a liability. Deferred revenues were accrued as liabilities at the time at which they occurred.

Contractual obligations were not accounted for in the financial system and neither were pension liabilities. The reason for the latter was that pensions were administered by the Provincial Treasury Department. The only accounting responsibility for the college was the maintenance of a payroll register to ensure that the appropriate deductions were made and submitted to Treasury, and that the correct information was available for the preparation of the employee T-4 slips. Compensated absences were also not accounted for and they were not recognized. The college did set up a reserve for sabbaticals.

Encumbrances were accounted for at College 'A'. They were reported on internal reports and on some reports to Alberta Advanced Education. They were not, however, reported on the annual financial statements because they were decommitted on the last day of the fiscal year and recommitted on the first day of the new fiscal year.

4.18.9.2 College 'B'

College 'B' had no long-term debt, and as a result, had no accounting procedures to deal with it. Accounts payable were accounted for on an accrual basis, as were deferred revenues. Deferred revenues were held in a liability account until the service for which the revenue was generated had been rendered. At that time, it was recognized as revenue.

Encumbrances were not accounted for in the accounting system and no reporting of them took place. A separate record of encumbrances was maintained and the information was available if any users required it.

As for compensated absences, contractual obligations, and pension costs, no specific accounting procedures were in place. Compensated absences were not accounted for at all. Contractual obligations were recognized as liabilities only when the service had been rendered to the college. Pension costs were recognized for payroll purposes only so that employee deductions and employer share could be submitted to Alberta Treasury, the organization which administered the pension plan. The college was also required to prepare employee T-4 slips, so a register of these deductions was maintained. No long-term accounting, however, was necessary.

4.18.9.3 College 'C'

College 'C' had no long-term debt. As a result, there were no procedures for dealing with it. It did, however, have an accounts payable account. Accounts payable were normally handled on a cash basis, but those payables which carried on into a new year were accrued at year end and shown on the balance sheet as liabilities. This treatment was the same as that accorded deferred revenue.

As for pension costs, a liability was recorded at the time the pension expense was incurred. This liability was shown for at most one month, and that was until the pension funds were submitted to the Alberta Treasury Department which administered the pension plan. The college had no long-term commitment for administration of pensions.

Related to pension costs were the issues of compensated absences and contractual obligations. The college did not recognize compensated absences, and it did not account for contractual obligations unless the service had been provided to the college and payment had not been made at year end. In such a case, the obligation would be shown as a liability at year end.

Encumbrance accounting was practiced at College 'C' but the reporting of encumbrances only occurred in a limited way. Encumbrances were recorded for accountable supplies and capital items, and they were reported on internal reports but not on reports for external users.

4.18.10 Accounting for Surpluses

The surplus section of the balance sheet is comparable to the equity section of the balance sheet for a commercial enterprise. It represents the difference between the assets and the liabilities. The surplus account balance increases when the revenue and expenditure accounts are closed out and when the revenues exceed the expenditures. A decrease in the surplus account occurs when the expenditures exceed the revenues for a given year.

Reserve accounts are also part of the surplus section. Reserves are established as "rainy day" funds for specific purposes. The reserves are committed from surplus accounts and shown on the balance sheet.

Interfund transfers are another issue that is related to the surplus section of the balance sheet. It may at times be necessary to transfer funds from capital to operating, for example. The accounting entry often involves a surplus account. The following sections cover the accounting for the surplus division at each of the colleges.

4.18.10.1 College 'A'

College 'A' had one surplus account for each fund except the ancillary services fund. From those surplus accounts, numerous reserves were set up and the interfund transfers normally flowed between surplus accounts. One exception was that the excess (deficiency) of revenue over expenditures in the ancillary funds flowed directly to the operating surplus.

4.18.10.2 College 'B'

College 'B' reported two types of surplus accounts. These were the operating surplus and the capital surplus. From these surplus accounts, numerous reserves were established. These reserves had restrictions placed on their use by the Board of Governors.

The ancillary fund had no surplus section, and as a result, any excess or deficiency of revenue over expenditure flowed directly into the operating surplus.

4.18.10.3 College 'C'

College 'C' showed a surplus account for each fund. Reserves were established from a surplus and were shown on the balance sheet. Interfund transfers affected the surplus account. The interfund transfers emanated from a surplus account of one fund and flowed into the surplus account of another fund.

4.18.11 Accounting for Revenues and Expenditures

The literature identified a number of questions with regard to the accounting of revenues and expenses. Regarding revenues, the issue of the timing of revenue recognition was significant. A related issue was that of cost recovery. How were cost recoveries accounted for? How were interdepartmental sales accounted for? Finally, the reporting of revenues on a gross or net basis was significant.

On the expenditure side, a number of issues were also raised in the literature. The basis on which expenditures were reported, that is by program, object of expenditures, or function, was of significance.

A final issue regarding revenue and expenditure accounting was the application of the matching principle. Was there an attempt to match revenues and expenditures in an accounting period? For example, was the matching principle applied to ensure that the expenditures, which were incurred to earn certain revenues, accounted for in the same accounting period as the revenues were generated? The above issues were identified in the literature as being relevant to the accounting for revenues and expenditures. Following is a description of the accounting treatment applied at each of the colleges which were studied.

4.18.11.1 College 'A'

At College 'A' the timing of revenue recognition seemed to depend on the nature of the particular revenue. Tuition fee revenue, for example, was recognized at the time at which the cash was received. The same was true for a variety of other revenues such as government grants, materials charges to students, parking fees, athletic fees, and room rentals. Revenue resulting from the completion of a contractual obligation, on the other hand, was recognized at the time that the invoice was issued. The offsetting debit entry was to the accounts receivable account.

Deferred revenues were retained in a liability account until year end, at which time the earned revenues were accrued in the appropriate revenue account. The revenues, which were not earned at year end, were retained as deferred revenues.

Cost recoveries, in a non-legal sense, represented contractual obligations on another party. The formality of a legal contract was often not carried out. The accounting treatment for cost recoveries was the same as for contractual obligations. The revenue was recognized at the time that the invoice was issued.

With regard to interdepartmental sales, these transactions were accounted for as though they were made with parties outside the organization. Furthermore, the revenues from internal sources were not netted out from the total revenues. The result of this accounting treatment was a possible overstatement of real revenue for every accounting period in which interdepartmental sales occurred.

Revenues from tuition and other fees were reported at net of fee refunds. The total of the refunds and the total of gross revenues were not shown, only the difference between the two was shown. All other revenues were reported at both gross and net amounts.

As for expenditures, reporting on an object of expenditure, function, and program basis was used. The precise basis was dependent upon the purpose of the report. For instance, in the annual report and in the financial statements, expenditures were reported by program, such as student services, and by function such as instruction. On internal expenditure reports, expenditures were shown on an object of expenditure basis and a cost centre basis. Expenditure budgets were also approved on an object of expenditure basis.

Most expenditures were typically accounted for on a cash basis. The accrual of expenditures occurred only at year end. As mentioned earlier, revenues were recognized at different times, depending on the type of revenue. As a result, it was difficult to match revenues with expenditures, and as such, no attempt to matching the two was made in accordance with the matching principle.

4.18.11.2 College 'B'

At College 'B' revenues were reported on a net rather than a gross basis. The net amounts were shown on the financial statements. One reason for this was the manner in which refunds were handled. All refunds were debited directly to the revenue account rather than to a revenue contra account. The offsetting credit was to cash. As a result, the gross revenue figure was not as obvious in the accounts.

Revenues were normally recognized at the time that obligations were fulfilled. This was particularly true of non-tuition fee revenue. If the revenues were collected in advance of the service being rendered, then the revenue was shown as a deferred revenue. The following transaction was used:

Cash	xxx	
Deferred Revenue		xxx

If, on the other hand, the cash was collected in arrears, the following journal entries were used:

Accounts Receivables	xxx	
Revenue		xxx

When the cash was actually collected, the cash account was debited and the accounts receivables account was credited as shown below:

Cash	xxx	
Accounts Receivable		xxx

Interdepartmental sales often occurred. The three ancillary enterprises often made sales to the other departments. When such sales occurred, the sales account was credited and the appropriate departmental object of expenditure account was debited, as shown below:

Departmental object of expenditure	xxx	
Sales		xxx

The result of that journal entry was to overstate sales, however, there was no affect on internal cash.

Expenditures were typically recognized on an accrual basis, and expenses not paid at year end were accrued. In reporting expenditures, all three bases, namely object of expenditure, function and program were used. For example, the functions of instruction and administration were shown on the financial statements as were the costs of student services and continuing education. For internal information purposes, expenditures were shown on an object of expenditure basis.

The matching principle was applied only in a limited way. It was used in the continuing education area where individual course offerings were treated as profit centres. All revenue and direct costs were matched for internal purposes and this information was used to determine whether particular courses were profitable and whether they should be offered or cancelled.

4.18.11.3 College 'C'

College 'C' reported its revenues on a net rather than a gross basis. The reason for this was that any refunds or reductions in revenue were debited directly to the revenue account rather than to a contra account. The following journal entries were used to show a refund:

Revenue	xxx	
Cash		xxx

Any amounts which were reversed from the revenue account were therefore not reported.

Revenues were normally recognized at the time that the service was provided. Tuition fee revenue was recognized in the year that the courses or programs were delivered. Government grant revenue, on the other hand, was recognized when it became receivable. Journal entry (1) shows the recognition of the grant revenue and journal entry (2) shows the collection of cash when it arrives:

(1) Accounts Receivable	xxx	
Grant Revenue		xxx
(2) Cash	xxx	
Accounts Receivable		xxx

Revenues were reported by major sources such as grants, tuition fees, investment income, and ancillary enterprises. Interdepartmental sales also occurred. Special attention was paid to these sales to ensure that no double counting of revenue occurred, and to prevent double-counting, interdepartmental sales were deducted from total sales at year end.

Expenditures were normally recognized on a cash basis. Any expenses incurred but not paid at year end, however, were accrued and shown as payables. For reporting purposes all three bases, namely object of expenditure, program, and function were used. The financial statements and the annual report showed expenditures by function such as instruction and management, and also some expenditures were reported by program such as student services. For internal purposes, the object of expenditure basis was more often used, particularly with individual program reports.

College 'C' did get involved in many cost recoverable activities. The definition of a cost recoverable activity was an activity incidental to the major purpose of the organization. For such activities a work order system was maintained and the cash was normally received at the completion of the work The revenues and expenses were recognized at the time that the work was completed.

College 'C' attempted to match revenues and expenditures. Although the matching was not evident in the financial statements, program revenues and expenditures were matched for internal information purposes. Such information was particularly important in the extension department in making decisions on whether to cancel or deliver courses or programs.

4.19 General Financial Accounting Principles

All post-secondary institutions are required by legislation to file audited financial statements on an annual basis. The purpose of this section is to review the principles which govern four particular accounting issues which were relevant to the annual financial statements. These issues were:

1. What principles governed the disclosure of information on the annual financial statements?
2. What principles governed the accounting and reporting of extraordinary items and prior period adjustments?
3. What safeguards were in place to ensure that the restrictions applied to restricted funds were not violated?
4. What principles governed the accounting and reporting of activities which overlapped fiscal years?

These four questions were addressed at each of the three organizations which were studied.

4.19.1 College 'A'

College 'A' did not have a policy governing its disclosure of information in the footnotes to the financial statements. The practices that existed evolved essentially from two primary sources. The first of those sources was historical practice. Certain items were disclosed in footnotes because they were seen as being important and no one questioned their disclosure in that form. Another important source of disclosure practice was the report of the Auditor General. In review of certain aspects of the College's operations, the need for new information to be disclosed came to light and was recommended in the audit notes. Such information often became disclosed and was likely to continue to be disclosed in the future.

A number of extraordinary items had to be accounted for occasionally. Such amounts were accounted in a separate account as revenue, but were usually not reported separately. The only time they were reported separately was when the amounts were material. The same principle was applied to the reporting of prior period adjustments. If the amounts were material, the adjustment to prior periods was also shown, otherwise the adjustment was reported along with current period activities.

The third issue, that of ensuring that violations to restrictions did not occur, was handled in three ways. First, the restricted accounts were established by source and by purpose. This served to highlight any restrictions. For further control purposes, a restricted fund cost centre was established against which all expenditures were charged. This made it easier to identify possible violations. The final safeguard was the review by auditors to ensure that the restrictions were adhered to.

The fourth issue dealt with activities which overlapped fiscal years. At College 'A' all expenses incurred but not paid for at year end were accrued as payables. Likewise, revenues collected for services not yet rendered were shown as deferred revenue at year end. Services rendered but for which payment had not been received were reported as accounts receivable at year end.

4.19.2 College 'B'

College 'B' used footnotes as a means of disclosing and highlighting information in its financial statements. The college, however, had no policy governing what information should be disclosed in this way. Three important factors were stated as having an influence on what information was disclosed. The first was historical practice. Certain information had been disclosed for some time and will continue to be disclosed. The second factor was that of judgement. If it is deemed by management that certain information should be disclosed, it usually was disclosed. The third factor was the Auditor General's report. The auditor's report often suggested that certain information be disclosed, and it usually was disclosed.

The college had little experience with accounting for extraordinary items. One incident was noted and it dealt with the expensing of supplies in one year which had been shown as assets in the previous year. The entry which was used is as follows:

Supplies Expense	xxx	
Supplies		xxx

The entry was footnoted and the affect on the prior period was also noted. The statements for the prior period, however, were not restated. This was the only noted example of an affect of a transaction on a prior period.

With regard to ensuring that violations to restricted funds did not occur, the college ensured that the restrictions were carefully specified. If a request for cash met the specific restriction, then the cash was issued. If there was some doubt, then permission in writing was sought from the donor or the custodian of the fund before any disbursements were made.

College 'B' was engaged in a number of activities which overlap fiscal years. The offerings by the extension department were one example of such an activity. All expenses incurred but not paid were accrued as accounts payable at the end of the year. Cash collected for services not rendered was shown as deferred revenue at year end. For a particular project, once the accruals and deferrals were finalized, a prorated surplus or loss on that project was calculated. This was a current practice at the college, but it was also a departure from previous practice because at one time expenses were accrued only to an amount equal to the revenues which had been realized. As a result, previously all incomplete projects were accounted for on a break-even basis.

4.19.3 College 'C'

College 'C' had no formal written policy outlining which information should be disclosed in footnotes. Historical practice had resulted in all significant accounting policies and reporting practices being summarized in the footnotes. Also, any changes in accounting and reporting practices were automatically disclosed. With regard to further disclosure, the accounting for the year end procedures was done according to GAAP. Any suggestion of disclosure in generally accepted accounting principles was therefore carried out.

Extraordinary items, both revenue and expenditures,rarely if ever, occurred. If such an item did occur, it would likely be the result of a disposal of certain inventory. As a result, it was shown as a revenue "below" the total of the regular college revenues. Also, any adjustments that would affect prior periods were also shown "below the line." This disclosure was done for both current year and the previous year. A footnote was used to disclose that information.

With regard to restricted funds and the assurance that the funds were expended in accordance with the stated mandate, all restricted funds were accounted for separately. It was felt that this separate accounting ensured that there were no violations of the mandates which were specified by donors or others authorized to set restrictions.

A number of activities at College 'C' have resulted in an overlap of two fiscal years. Such activities were handled in a number of ways. Revenues and expenditures were accrued at year end. Certain revenues were shown as deferred revenues and some expenses were carried as assets in a prepaid expense account. Also, outstanding salary settlement payments were accrued at year end. There was no special accounting provision for activities which overlapped two fiscal years other than the accrual approach.

4.20 The Use of Cost Accounting Principles

Much of the information which has been covered in this chapter concerned financial accounting and reporting, as well as some management accounting. Another area of accounting which is of significance to organizations is cost accounting. This discipline deals with the determining of direct costs associated with activities, as well as, determining and allocating of indirect costs to those activities. Cost accounting can be an invaluable tool in budgeting.

Various questions with regard to the application of cost accounting were significant. The first was the use of cost accounting principles. The second dealt with the existence of a job order costing system and how it was implemented. The third dealt with the use of unit costing.

4.20.1 College 'A'

College 'A' used cost accounting to a limited degree. Attempts were made to relate direct costs to their respective programs and services. Insofar as the indirect costs of activities were concerned, only limited attempts were made to allocate those costs back to particular operations. Indirect costs such as utilities were charged to the physical plant department and attempts at controlling those costs were done directly through that cost centre. Other costs such as those related to the operation of the learning resources centre could have been allocated to operating departments on some basis such as full-time equivalencies or enrollment, but they were not.

College 'A' also made some limited use of job order costing. This was particularly true in extension activities. The extension department was established as a profit centre and the matching of revenues and expenses was attempted. The same was true for special project activities which were funded on an ad hoc basis through funding sources like Alberta Vocational Training. It was felt that the most success was achieved in determining the direct projects costs. Difficulties arose in determining of indirect costs and what ended up being charged back to projects was a percentage allocation of the direct costs. For direct costing purposes a template was available to users to serve as a guide for developing budgets.

The College also did not have a unit costing system in place. Attempts were made to compare staffing between terms, but such attempts were made on a aggregate basis only to satisfy curiosity.

4.20.2 College 'B'

College 'B' used the cost centre and profit centre approach extensively. For example, the student services department as well as the administrative areas were regarded as cost centres. Each extension course and/or program and each ancillary enterprise was regarded as a profit centre and both the revenues and expenses were monitored and their goals were set on the basis of the profits that were expected to be generated. The costs generated against the centres were measured, but they tended to be direct costs only. Indirect costs tended not to be allocated back to operating departments. Examples of costs which were not allocated back were administration, capital, facility costs, accounting costs, and other administrative costs. For off-site activities, on the other hand, greater attempts were made to allocate indirect costs back to the profit or cost centres. Among the costs that were allocated back were: capital, accounting services, facility costs, and utilities.

College 'B' did not utilize a unit costing system, nor did it have a job order system. The closest activity to a job order system related to its cost recoverable activities. Such activities were regarded as profit centres and capital, accounting, facility and general overhead pertaining to the project were charged to the project. General administrative overhead was charged as a percentage of all other costs combined.

4.20.3 College 'C'

College 'C' used a variety of cost accounting procedures. For internal purposes, these procedures were in place primarily for controlling costs rather than determining costs. According to college sources, four main procedures were in place. The preparation, distribution and expected adherence to budget guidelines during the budget preparation process was one such procedure. Second, the expectation was that all expenditures were related to a predetermined budget. This, too, was clearly an attempt to control costs. Third, budgets were prepared in accordance with previously determined guidelines which served to provide limitations on the amounts by which budgets were allowed to increase. Although this approach could rely heavily on cost accounting theory, it did imply a certain faith in the historical costs which had been derived previously. Fourth, the use of capital budgeting techniques to assist with the decisions to buy or lease capital equipment, or to replace or repair equipment relied heavily on cost accounting. The use of those techniques required that cost estimates be determined and this drew heavily on cost accounting techniques.

College 'C' used a job order costing system for various types of activities. The two most common activities were major renovations and new building construction. The individual project costs were estimated, and upon completion of the project, the job order report was reconciled with their general ledger. It was noteworthy that only certain types of jobs were charged back to the user departments. For example, there was often no charge back on renovations to user departments. The cost of renovations was absorbed by the physical plant department. The purpose of the job order costing system was therefore as a tool to estimate costs and later, during the project, to control costs.

With regard to administrative and other overhead, it should be noted that no overhead was charged back to the user department. All services were absorbed by the departments which provided those services. For instance, the cost of operating the financial services department did not get charged back to operating program areas. With ad hoc funded activities, however, a greater attempt was made to capture and allocate both direct and indirect costs to programs. The direct costs were charged directly to the program budget and a charge for indirect costs was also allocated to the program. This charge was usually a per cent of the total program budget.

College 'C' did not have a unit costing system. No per student basis of unit costing was used. However, the Department of Advanced Education calculated a cost per full-time student equivalent for its planning purposes.

4.21 Accounting for Ancillary Enterprises

Most Colleges in the Province of Alberta have ancillary enterprises. Ancillary enterprises are those operations which are expected to "break-even" or show a profit from their operations. Examples of ancillary operations were bookstores, food services, print shops and residences. They were accounted for separately because it was expected that they would be self-sufficient from an operational standpoint, and that they would provide a necessary "support service" to regular college operations.

This section deals with the accounting practices for assets, liabilities, surplus, revenues and expenses of ancillary enterprises. Also, the nature of their fund structure was investigated.

4.21.1 College 'A'

College 'A' had two ancillary enterprises. For financial statement reporting purposes, both operations were rolled into the ancillary services fund. For practical purposes, however, both were treated as profit centres and any surplus or loss was transferred into the general surplus account.

Neither enterprise held any assets on its own. All assets belonged to the college. Any materials required by either operation were simply expensed at the time that they were acquired.

The ancillary enterprises did not incur any liabilities on their own. If an accounts payable did happen to arise, it was shown as a college liability rather than an enterprise liability.

The enterprises could generate a surplus or a loss at the end of the fiscal year. That surplus or loss was never carried over into the new fiscal year, but rather it was transferred into the college general surplus fund at year end.

The revenues and expenses for each enterprise were recorded by source. For reporting purposes, the revenues and expenses were combined into general categories. For example, the cost of operations included all related direct costs required to operate the enterprise.

Because the enterprises were regarded as profit centres, the only account divisions that were of any significance to them were revenues and expenses. The balance sheet account divisions were of no significance because these divisions were taken care of directly through the college general operating fund.

4.21.2 College 'B'

College 'B' had three ancillary enterprises. For annual reporting purposes, all three enterprises were reported in one ancillary services fund. For internal purposes, however, each was regarded as a profit centre within the operating fund.

None of the enterprises held any assets on their own. All assets were held centrally as part of the general college operations. Any current assets such as inventory, were shown as part of the college assets.

None of the enterprises had any liabilities of their own. Any liabilities that were incurred on behalf of the enterprise were shown as liabilities of the college.

In addition, none of the enterprises carried over any surpluses or losses into a new fiscal year. Any surplus or loss which may have resulted from operations was transferred into the surplus account of the general operating fund at year end.

The important accounting aspect for ancillary enterprises was the revenue and expense divisions. For all intents and purposes, the goal set for those enterprises was break-even based on the recovery of direct costs. If they recovered their salary expenses, the cost of goods sold, and supplies, they were seen as having met their objectives. One noteworthy aspect, was that sales by the enterprises to internal customers were not netted out. As a result, the institutional revenue was overstated by the amount of sales to internal buyers.

The ancillary enterprises did not have balance sheets. The only statements prepared for them were profit statements. Any inventory changes which resulted from the quarterly physical inventory were reflected on the college inventory accounts.

4.21.3 College 'C'

College 'C' had four ancillary operations. Separate records were maintained for each ancillary enterprise in a subfund, however, for annual reporting purposes, the records of all four were rolled into one ancillary services fund. Additional information on the operations of the individual enterprises was available in the footnotes to the statements.

None of the ancillary enterprises had any balance sheets accounts. The only relevant accounting activity for them was the revenues and expenses. To that extent, each ancillary enterprise was regarded more as a profit centre rather than a fund or an entity. Because of the profit centre nature of the ancillary enterprises, they had no assets of their own. All assets, both operational and capital, were held by the college and not the ancillary operation. The same was true with liabilities. The liabilities incurred by the ancillary enterprises were shown as liabilities of the college and not the ancillary operations.

With regard to the surplus division, essentially the same was true as for assets and liabilities. For all ancillaries except one, any surplus or loss was rolled into the college operating surplus at year end. The purpose in the case of the exception was to ensure that funds were available for the acquisition of items of a capital nature.

With that one exception, all enterprises were treated as profit centres. Consequently, only the revenue and expenses sections of the financial statements were of relevance to them.

4.22 Summary

The purpose of this chapter was to provide an overview and description of the budgeting, accounting and reporting systems used at the three post-secondary educational institutions which were part of this study. Each description took in a broad perspective of the systems which were studied. The basic underlying assumptions for the systems were covered, as were the objectives and principles which were derived from those assumptions. Then, the practices utilized in the everyday execution of the functions were described as well.

As explained earlier, the purpose of these descriptions was to be able to make comparisons and to draw contrasts in the practices used in the institutions. Further, the descriptions were used to assess the impact that any differences in practice may have on the type and quality of the information which was provided to users.

The drawings of those comparisons and contrasts as well as the implications that they may have on budgeting, accounting and reporting is the topic of the next chapter.

Chapter 5

COMPARING AND CONTRASTING BUDGET ADMINISTRATION PRACTICES

5.1 Introduction

The previous chapter contained a fairly extensive description of the accounting practices utilized at each of the three post-secondary institutions which were part of this research. Also the assumptions, objectives and principles which form the underlying basis of the financial systems were described. In addition, the budgeting and reporting practices were described.

In this chapter a comparison of the practices at the three institutions is carried out. Similarities in the practices, as well as variations, were studied and highlighted. This comparison and contrast was done in a descriptive format.

5.2 Information Users

The users of financial information which is generated by a public institution can be many and varied. All three institutions indicated that a major user was the Department of Advanced Education. In addition, since each college was board governed, each mentioned its Board of Governors as a primary user. Also, in each case, internal management was identified as a user. All three colleges shared their annual reports with other colleges, and all made their reports available to the general public on request.

At Colleges 'A' and 'C', financial information was made available to other funding sources relative to the funding which those agencies had provided for specific projects. Examples of other funding sources were the Alberta Vocational Training Program and the Canadian Job Strategies. Preparation of a separate report was normally a requirement by the funding agency at the time that the funding was provided. In general, the user groups for the colleges were the same. No significant difference in the user groups was obvious, other than for the ad hoc funding sources.

5.3 Needs of the Information Users

As shown in the interview guide, which is found in Appendix I, a large list of possible user needs can be established from the literature. According to those criteria, all three colleges identified a great many common needs. Colleges 'A' and 'C' identified identical needs. The only difference occurred at College 'B'. They did not identify four of the needs which were identified at the other colleges. Those four needs were:

1. the need to demonstrate the maintenance of generational equity;
2. the need to demonstrate the ability to meet obligations;
3. the need to demonstrate the ability to continue to provide programs and services; and
4. the need to evaluate the uses of reserves in the accomplishment of objectives.

With those exceptions, all the remaining needs were common to all three organizations.

5.4 Underlying System Assumptions

The current political and economic climate was identified by Colleges 'A' and 'C' as a basic assumption which influenced the development of the accounting, budgeting, and reporting systems. In the case of College 'A', the decline in the purchasing power of the grants was identified as a major concern. At College 'C' the need for a greater degree of internal control was a concern that was also caused by lower funding levels.

The political and economic climate was not identified at College 'B'. The basic assumption at College 'B' related to the need to develop and maintain an information system which was user friendly and had all subsystems integrated. These attributes were seen as necessary in meeting the needs of users. As such, no environmental assumptions were considered in the development of the financial management systems at College 'B'.

5.5 Objectives of the Accounting

All three colleges identified the maintaining of information required to communicate results, including budgeting activity, and the communication of future plans, as the objectives of accounting. At College 'B', the maintenance of integrity and consistency of information was also identified as a major objective. At College 'C' the ability to maintain the necessary and appropriate records as well as the maintaining of adequate internal control were also listed as objectives. The basic objective which was common to all three institutions was, however, the ability to provide information which was necessary to communicate results and to develop budgets.

5.6 Accounting Principles

There were a total of thirteen accounting principles identified in the literature. Of those thirteen principles, seven were identified as important to all three colleges. Those seven principles were: relevance of information; verifiability of information; comparability of information; the need for a double-entry system of accounts; the cost principle; the reliability of the information; and the practicability of the information. All of these guided the development of the accounting systems at all three colleges. In none of the colleges was the conservatism principle used as a guiding principle. The ease of communication was a guiding principle at Colleges 'A' and 'B'. Materiality and consistency were principles used at Colleges 'A' and 'C'. Disclosure was a guiding principle at College 'A', and objectivity was a guiding principle at College 'C'. In terms of overall comparison, however, seven principles of the thirteen which were listed were identified at all three colleges.

5.7 General Financial Accounting Practices

This section deals with some general accounting practices. Four basic areas of interest were covered:

1. disclosure policy;
2. the treatment of extraordinary items and prior period adjustments;

3. the existence of safeguards against violations to restrictions; and
4. the accounting and reporting of activities which overlapped fiscal years.

With regard to the issue of disclosure policy, none of the colleges reported having a disclosure policy as such. Historical practice played a significant role in determining whether or not a particular disclosure was made in the notes to the financial statements. Recommendations by the auditors were also used at all three colleges to assist in determining what information would be disclosed in the footnotes.

The second financial accounting issue involved extraordinary items and prior period adjustments to the financial statements. Two of the colleges had very little experience with extraordinary items and, if they had, the amounts were often not material and therefore were not reported. When they were material, however, the adjustment was shown "below the line."

Prior period adjustments were handled "below the line" in the same manner as the extraordinary items. One college also noted prior period adjustments in the footnotes. Generally speaking, however, the experience with both of these issues was quite limited at all three colleges.

With regard to safeguards which were in place to protect against violations to restricted funds, all three colleges had separate restricted funds, and they were subject to audit to ensure that violations did not occur. Also restricted fund cost centres were established for additional control purposes. These cost centres were established by purpose and by source. At one of the colleges, a further step was taken. A letter was required on file from the custodian of the funds indicating concurrence of the expenditure with the intent of the donor.

The last issue dealt with the accounting and reporting of activities which overlapped fiscal years. All three colleges accrued revenues and expenditures at year end. Revenues collected but not earned were deferred.

As noted in the above discussion there was a good deal of common practice in dealing with these four general accounting issues. Some variability may have existed, but that was the result of the different stages in organizational development that the colleges were at.

5.8 Cost Accounting

As was the situation in the private sector where the theory and principles relating to cost accounting were far less refined than were the principles of financial and management accounting, the same was the case in the public sector. One of the major problems which seemed to exist was the difficulty in dealing with indirect costs.

One practice that seemed to be quite common at the three colleges was the use of the cost centre and/or profit centre concept. At two of the colleges many of the extension activities were established and tracked as profit centres. The decision to deliver or cancel a particular course was based on the profitability of that course. Included in the cost of the delivery of a course was the direct costs, and an allocation for indirect costs. The computation of indirect costs was often not based on a sound theoretical framework, but rather on an arbitrary allocation.

Only one of the colleges used a job order costing system. The system was used primarily for renovations. It was used for cost control and not for allocating those costs back to programs or cost centres. Minor renovations were typically charged to a central plant account unless they resulted in an extension of facility area. In these cases they were charged back to the operation as were other maintenance charges.

With regard to allocation of certain charges back to programs, all three colleges made a greater attempt to capture all relevant program charges in ad hoc or "soft funded" activities than they did in regular base funded activities. The reason for this was that the ad hoc activities, which were often delivered by extension or continuing education departments, were expected to be cost recoverable. It was important to capture as many of the indirect costs as possible, because any uncaptured costs would have to be recovered from regular base funded activities and this would cause an erosion of base budget. This was a common practice at all three colleges.

The final issue was that of a unit costing system. Such a system was not used in any of the colleges which were studied.

As was mentioned at the outset of this section the theory of cost accounting in the public sector was not well developed, just as it was not in the private sector. It was noteworthy, however, that at all three colleges interest in cost accounting was expressed. Two motivating factors seemed to exist. The first was the lack of ability to capture indirect costs and overhead. The second was the need to determine per student costs for internal decision making. The former seemed to be motivated by a larger amount of cost recoverable activities engaged in by colleges. The latter seemed to be largely the result of the need for more equitable resource allocation in times of fiscal restraint.

5.9 Structure of the Accounting and Reporting Systems

The structure of the accounting and reporting systems was common in all three colleges which were studied. All three used a functional structure for their annual financial statements and the annual reports. Expenditures, for example, were identified by cost objectives such as instruction, student services, president and board, and administration.

For internal reporting purposes, all three used an organizational structure as well as an object of expenditure structure. Each college prepared internal expenditure reports by department and/or program. Within these reports the expenditures were further broken down into object components such as salary, benefits, travel, supplies, and contracted services, to mention a few. As for the structure of the accounting and reporting systems, it can be concluded that all the colleges used common practices.

5.10 Accounting Funds

All three colleges had the same basic funds within their accounting structure. Each had a capital fund which was used for the acquisition of capital assets and minor capital renovations. Also, each had an operating fund in which operating revenues and expenditures were accounted. An ancillary services fund existed in the accounting system of each college. A difference in the use of this fund did exist among the colleges in that not all colleges designated the same activities as ancillary operations. This was not necessarily an accounting issue. The fourth fund which was common to all colleges was the restricted fund. Endowments and scholarship monies made up the bulk of the restricted fund. At two of the colleges, a component of the restricted fund was the "Funds Held on Behalf of Others". With those two minor exceptions, the structure of the fund accounting system was the same at all three colleges.

5.11 Bases of Accounting

There were some differences among the colleges as to the bases of accounting which were used. Both College 'A' and 'C' used essentially a cash basis during the fiscal year. Revenues and expenditures were accrued only at year end. College 'B', on the other hand, used an accrual method throughout the year.

5.12 Accounting Standards

Two accounting standards were common to all three institutions. The first of these was program accounting. Direct expenditures, in particular, were tracked on a program basis. Program accounting was emphasized at College 'C' in relation to ad hoc programs such as those funded through Alberta Vocational Training or Canadian Job Strategies.

The second common standard was the classification of and reporting of revenue by source. At each college various revenue sources were noted. The most common ones were grants from the Province of Alberta, tuition fee revenue, investment revenue, proceeds from the disposal of assets and donations. The revenue classifications seemed to be the same at all three colleges.

College 'C' did not identify the principle of accounting for all assets and liabilities as a standard as did the other two colleges. The particular reason for this was a matter of timing. Because it used a cash basis for accounting throughout the year and an accrual basis at year end, some assets and liabilities were capitalized only once per year and as a result were not shown "on the books" until year end.

Only one college, that being College 'A', used the matching principle for revenues and expenses. No mention of this principle was made at the other colleges.

In addition, only College 'B' used a form of encumbrance accounting and reported encumbrances, albeit only on internal reports. Encumbrance accounting was not practiced at the other two colleges.

5.13 Reporting Standards

The description of the reporting practices and the subsequent comparison showed that there were a number of reporting standards which were common to all three of the colleges which were studied. There were a total of ten standards which were common. The first common standard was that in all cases reporting is done on a fund basis. Second, all three agreed that Funds Held on Behalf of Others should be shown and reported as liabilities. Third, all three had a capital fund which was used for acquisition of capital and renovation to capital facilities. None used the fund for the retirement of debt. Fourth, all three reported revenues in the year in which they were earned. Fifth, all reported ancillary operations separately from general institutional operations. It is noteworthy, however, that an operation which was termed an ancillary at one college may not necessarily be deemed to be an ancillary operation at another college. Sixth, all prepared a comprehensive financial report annually and it became an integral part of the annual report. Seventh, the components of the annual report were in all cases clearly identified to avoid confusion and ambiguity. Eighth, in all cases the statements provided a fair presentation of the financial condition of the operation. This was attested to in the accompanying auditor's report. Ninth, fixed assets were accounted for and reported at historical cost. Donated assets were reported at fair market value. In all cases attempts to establish fair market value by independent sources were made. Tenth, expenditures were reported by function, by program and by object of expenditure. The above ten standards were common to all three colleges.

There were also three reporting standards to which none of the colleges subscribed. First, none of the colleges reported revenue from trusts and endowments as gifts. Second, none of the colleges disclosed the restrictions to the restricted funds in their annual reports. Third, none of the colleges reported their encumbrances and commitments in their annual report.

The remaining reporting standards which are presented in the interview guide in Appendix I were adhered to by one or two of the colleges but not by all three. For example, only two of these colleges presented interfund transfers on a net basis. Also, only two reported restricted fund revenues in the year that they were expended on a pre-determined purpose. Only two colleges felt that they fully disclosed the basis of asset and liability valuation. Likewise, only two of the three felt that it was necessary to report revenues and expenditures on a gross basis.

5.14 Setting of Accounting and Reporting Standards

There were four major sources of accounting and reporting standards that were common to all three colleges which were studied. Those four sources were: the Canadian Institute of Chartered Accountants (CICA) Handbook; the Canadian Association of University and College Business Officers Handbook; meetings and discussions among senior business officers in other Alberta Colleges, as well as meetings of subcommittees of that group such as the committee of senior accounting officers; and the Department of Advanced Education. Two of the three colleges also identified the Auditor General as an important source of standards.

5.15 Types of Statements Which were Prepared

There were four statements that were prepared by all three colleges. These statements were:

1. Statement of Financial Position,
2. Statement of Changes in Fund Balance,
3. Statement of Changes in Equity in Capital Assets, and
4. Statement of Reserves.

In addition, two colleges prepared a Statement of Restricted Funds and the other did not always do so.

It was noteworthy that there was commonality in practice in regard to the statements which were prepared, and there was also some commonality among some of the cost objectives, in name at least. The composition of the cost objectives, however, was not necessarily uniform. For example, the cost objective "instruction" in some cases included counselling but not in others.

The forgoing discussion dealt primarily with the financial statements which were part of the annual report. All the colleges also prepared reports for internal purposes. In all cases expenditure reports were prepared for each cost centre. Also, revenue reports were prepared for each revenue centre. Depending on the nature of the organization, varying amounts of combination occurred in the reports for senior managers. This means that the level of detail in the reports varied in accordance with the seniority of managers.

5.16 Objectives of Reporting

The objectives of reporting, which were listed in the interview guide in Appendix I, were all identified as objectives by College 'A'. At College 'B', all of the objectives were subscribed to except one which was "to provide the information required to assess the ability of the College to finance activities and meet its obligations." It was felt that this objective related more directly to the internal reports.

College 'C' did not subscribe to a number of objectives. These were:

1. to show the sources and uses of resources,
2. to facilitate evaluation, and
3. to provide information about the restrictions placed on the financial resources of the college.

It should be noted that in all three colleges the need to meet legislative requirements, and the need to demonstrate propriety and compliance were objectives which were clearly identified.

5.17 Financial Statement Format

All three colleges used a layered format for their Balance Sheet. The Statement of Changes in Fund Balances in each case was columnar. Also, all three colleges used a common funds flow format for their Statement of Reserves, the Statement of Changes in Equity in Capital Assets, and the Statement of Restricted Funds.

5.18 Components of the Annual Report

The annual report of each of the colleges had a letter of transmittal from the President to the Minister of Advanced Education. Each report had a financial section which was comprised of an auditor's report, the financial statements, and the footnotes to the financial statements. Also, the reports from each of the colleges had a President's Message. In addition, in each report an organizational chart and a statistical section were provided. The statistical section in all cases included an enrollment summary and a staffing summary. In two of the three cases, college divisional reports were also included as part of the annual report.

In summary, the common elements of the reports were the letter of transmittal, the president's report, the statistical report and the financial statements. Within these sections, however,there may be some variability as to the information which was provided. In addition, depending on the college, some extra information may have been provided to highlight particular features or events.

5.19 Audit Reports

All three colleges indicated three common objectives for the auditor's letter in the annual report. These objectives were:

1. to provide assurance of fair presentation and conformity with generally accepted accounting principles;

2. to provide assurance of compliance with legal requirements and restrictions; and
3. to comment on the economy and efficiency of operations.

There was only one other objective indicated at one college and that was regarding educational effectiveness of programs. At College 'C' it was felt there was an attempt in the auditor's report to address the issue of program effectiveness. Similar feelings were not evident in College 'A' and 'B'.

5.20 Use of Footnotes and Schedules

Each of the colleges prepared a section in the annual report entitled "Notes to the Financial Statements." Each college provided ten notes and six were common to each of the colleges. The common ones were:

1. an indication of the authority under which the college operated;
2. a summary of significant accounting policies and reporting practices;
3. a summary of the cost of the capital assets which were held by the college;
4. a summary of the grants received by the college from the Province of Alberta;
5. a statement about the comparability of the figures and a restatement where necessary so that the current year and the previous year were similarly reported; and
6. an indication that the statement had the approval of management.

The remaining notes tended to represent circumstances that seemed to be unique to the particular organization.

5.21 Reports for Internal Use

All three colleges prepared monthly expenditure reports for cost centre managers and administrators. Included in the reports was the budget for the cost centre to allow for a comparison between actual expenditures and budgeted expenditures. In all three cases the budget and the expenditures were presented on a line-item or object of expenditure basis. In addition, a revenue statement was prepared at all three colleges for their revenue centres. The budgeted revenues were provided in all cases for comparative purposes. Those centres which had both revenue and expenditure responsibilities received both revenue and expenditure reports. At two of the colleges an operating report on each of the ancillary operations was also prepared. The operating reports contained both revenues and expenditures. Any remaining reports which represented the unique needs of a college were prepared only at that College.

5.22 Presentation of Comparative Information

At all three colleges two types of comparative information were presented. In the annual report and in the financial statements, previous year and current year information was provided for comparison. On internal reports, on the other hand, actual results and budgets were presented so that comparison of actual to budgeted plans could be made.

5.23 Budget Factors

All three colleges identified three major budget factors which they considered in their preparation of budgets. These factors were personnel, supplies and services, and the capital items which were necessary for the program. Facilities and the other factors were not considered on a program basis unless the costs represented a direct cost to the program. Normally facilities were regarded as an indirect program cost and were accounted for in a physical plant account category. However, if they pertained to an ad hoc funded program, an attempt was made to capture them.

5.24 The Budgeting System

The review of the budgeting practices revealed that there were a number of characteristics which were common to all three systems which were investigated. One common characteristic was the top-down approach. This pertained in large part to the establishment of priorities and parameters that were part of the budget instructions. Normally these instructions were set by senior management, often with the approval of the Board of Governors or a Board subcommittee, and were provided to middle management and program administrators to assist in their preparation of budget forecasts. Very often the budget instructions were based on an incremental model and were related to the estimated adjustments to the government grants.

At none of the Colleges did the use of the incremental model for generating budget instructions imply that the incremental approach was the model used throughout the budgeting process. In all cases the basic program planning took place at the program level. This represented the first level of priority setting. The dean or director level, a level responsible for a number of programs, was the next level at which priorities were set. At this level, program priorities could be changed, resulting in incremental increases to individual programs becoming variable. The third level of review was the senior management level. Priorities may again be changed at that level, thus creating more variability in the incremental increases to the various programs and units.

Once the final budgets were approved at all levels in all three colleges, they were presented to the Board of Governors for approval. A balanced budget was then submitted to the Department of Advanced Education.

It is noteworthy that the general processes used at each college were very similar. All three colleges had identical fiscal years, commencing on July first of each calendar year. The budgeting cycle normally commenced four to six months prior to the commencement of the fiscal year.

The process described dealt with the operating budget. Similar processes were used for capital budgeting. No research was conducted into the budget estimating process which included a longer-term planning cycle for both operating and capital.

5.25 Account Divisions

All three colleges used four funds in their system. These funds were: the operating fund, the restricted fund, the capital fund, and the ancillary services fund Each of the first three mentioned had five account divisions, and they were: assets, liabilities, fund balance (surplus), revenues, and expenditures. At each college, the ancillary services fund had only the revenue and expenditure divisions. In this fund, any excess or deficiency of revenue over expenditure was transferred to the operating fund. As a result, the ancillary services fund was shown separately on the Statement of Changes in Fund Balances only, but it was not shown separately on the Statement of Finance Position.

5.26 Accounting for Non-fixed Tangible Assets

At each college only one cash account was reported, but a separate accounting of the cash in the various funds was maintained. In terms of bank accounts, it was common to have a number of different ones such as a general operating account, a payroll account, and a U.S. account, to mention a few. There appears to have been a good deal of commonality in practice in the accounting for cash.

All three colleges followed quite conservative investment practices. Normally surplus cash was invested in secured debt instruments such as term deposits or treasury bills. No equity investments were made. In all cases investments were valued at cost. A difference in timing of revenue recognition did exist, however. At two of the colleges, investment revenue was recognized when paid, or when it was accrued at year end if the investment term overlapped two fiscal years. At the third college, the accrual of revenues occurred monthly and was reported on that basis as well.

None of the colleges had any policies in place regarding the disclosure of investments in the annual report. Periodic investment reports were provided to the Board of Governors.

With regard to the pooling of investments, only two colleges pooled investments. At both of these places, the interest revenues were prorated at year end and accrued to the appropriate fund.

In accounting for receivables, at two of the colleges revenues were accrued at year end so that any off-setting accounts receivables were recognized at the same time. One college used a full accrual basis for these revenues, as well, and as a result recognized receivables throughout the year.

For some activities, the recognition of receivables was tied to contract administration. The terms expressed in a contract often triggered the recognition of a receivable and the issuing of an invoice.

Two of the three colleges used a similar inventory accounting practice. Expendable assets whose unit cost is less than one hundred dollars, were expensed for inventory purposes at the time of purchase. Those items which cost between one hundred and five hundred dollars per unit were expensed for financial reporting purposes but were recorded in inventory for security purposes. These items typically had a useful life greater than one year. Those assets whose useful life was less than one year were expensed when purchased.

The last non-fixed, tangible asset which was investigated was prepaid expenses. Some examples of prepaid expenses were taxes, insurance, and leases on photocopiers. One of the colleges accrued the remaining value of the prepaid expenses at year end and reported that value as at that time. Two colleges wrote their prepaid expenses off monthly.

The analysis of accounting of non-fixed tangible assets showed some variability in practice. However, the extent and nature of variability did not seem to be significant.

5.27 Accounting for Fixed Assets

The second category of assets which was studied was what are termed fixed or capital assets. A fair amount of commonality was found in the treatment of these assets. At all three colleges, the following classes of fixed assets existed: land, buildings, and furniture and equipment of unit cost greater than five hundred dollars. At one college, the library holdings were considered to be capital.

Leaseholds were accorded different accounting treatments. At one college they were capitalized, at the second they were expensed, and at the third college no comment with regard to the accounting treatment was made because the college did not have any.

A common accounting feature was the cost basis for the valuation of fixed assets. All three colleges basically used the historical cost basis for valuing capital assets. One exception existed, however, and that was at one college where donated assets were recorded at estimated value for insurance purposes and at "matching grant" value for financial purposes. Matching grant value was the value used for matching purposes with the provincial endowment fund. No depreciation was applied at any college.

Some variability existed in the accounting for repairs of a major nature. At two of the colleges major repairs were capitalized and their value is added to the cost of the asset. At the other college all repairs were expensed to the operating fund.

With regard to accounting for renovations, some variability also existed. At two colleges renovations were capitalized, provided the renovation resulted in an increase in area of the facility. If such was not the case, the cost was expensed through the capital fund. At the other college, all renovations costing in excess of five hundred dollars were capitalized regardless of whether there was an extension in area or not.

Capital lease agreements were treated similarly at two of the colleges. In two cases, capital lease payments were expensed at the time that the payment was made. The other college treated capital leases as capital acquisitions, and expensed a portion of the capital lease on an annual basis.

The final capital issue studied was the disposal of assets. All three colleges disposed of surplus assets and seemed to account for the disposal in the same way. Normally the accounting took place on an annual basis and the accounting entries were:

Cash	xxx	
Capital Revenue		xxx
Equity in Capital Assets	xxx	
Fixed Assets		xxx

5.28 Accounting for Intangible Assets

Two of the three colleges did not report any intangible assets and consequently did not have an accounting procedure in place for handling them. With the third college, only copyright was an issue. If copyright was purchased, it was expensed as copyright expense. Copyright on internally developed materials, on the other hand, was not accounted for at all.

5.29 Accounting for Liabilities

A number of different liabilities were investigated and a good deal of similarity was discovered in the accounting treatment of these items.

The first similarity was that none of the colleges had any long-term debt and as such did not have to account for it, and therefore had no procedures in place. Second, there were two liability accounts which were common to all three colleges. These were the accounts payable account and the deferred revenue account. Two of the three colleges also had a third liability account and that was "Funds Held On Behalf of Others."

There was, however, some difference in the way that the common accounts were treated. One of the colleges accounted for its deferred revenues and accounts payable on an accrual basis. The other two used the accrual basis for deferred revenues only. They accounted for accounts payable on a cash basis and accrued only those accounts payable which remained outstanding at the end of the fiscal year.

Another similarity in practice was that none of the colleges recognized, and as a result did not account for, any compensated absences. No recognition or disclosure for any benefits such as vacation earned but not taken was made at any of the colleges. Likewise, none of the colleges accounted for pension costs. Each was under the Local Authorities Pension Plan and all contributions were turned over to the Province on a monthly basis. Once the funds were turned over, the colleges' responsibility ceased.

A third similarity was the accounting for contractual obligations. All of the colleges accounted for these obligations when the liability was actually incurred.

The last liability-related issue was that of encumbrances. Two of the colleges reported encumbrances regularly on internal reports, but not on any external reports. The third college did not report encumbrances regularly, but it did retain the information, should it have been necessary to refer to it. Only one of the colleges made that information available to Alberta Advanced Education. None of the colleges reported encumbrances in the annual report.

From this discussion it is evident that there was a great deal of common practice in accounting for liabilities. The major difference resulted from the fact that one college used a full accrual basis of accounting whereas the other two used a modified basis. Other than that point, the practices had very much in common.

5.30 Accounting for Surplus (Fund Balance)

The surplus section of the balance sheet represented the difference between the total of the assets, and the total of the liabilities and equity in capital assets. Within the surplus section are the fund balance accounts and the reserve control accounts.

At all three colleges, it was reported that a surplus section existed for each fund except the ancillary services fund. It is from this section that the reserves were created. The reserves were many and varied, but for balance sheet purposes, in each case, all of the reserves were accumulated into one reserve account. The disclosure and composition of that account was provided in the footnotes to the financial statements in a special Statement of Reserves.

Another similarity was the manner in which interfund transfers were dealt with. In all cases, interfund transfers were handled "below the line." This means that they were dealt with after all normal revenues and expenses for the fund were accounted for.

5.31 Accounting for Revenues and Expenditures

There were seven accounting issues which were studied in relation to the accounting for revenues and expenditures. The first of these issues was the application of the matching principle to the revenues and expenditures. The study showed only similarity in practice with regard to that principle. Again, the major reason for this was the difference in the basis of accounting which was used. Two of the colleges used essentially a cash basis or a modified cash basis for accounting and as such the matching principle was difficult to apply. At these colleges, accrual of revenues and expenditures took place only at year end. To that extent the matching principle was adhered to, but the application was quite limited.

It should be noted, however, that at those two colleges a second interpretation of matching was utilized. Matching was related to the use of program accounting rather than matching on the basis of timing. At these colleges the appropriate program revenues and expenditures were matched on a program basis, at least in such areas as extension and continuing education.

The second issue relating to the accounting for revenues and expenditures was the timing of the recognition and reporting of revenues. The key in this discussion was the nature of the revenue. With regard to grant revenue, two of the three colleges recognized the revenue at the time that it was received. The third college accrued the revenue at the beginning of the year and as the grant installments arrived, the appropriate credit was made to the accounts receivable account.

Regarding tuition fee revenue, two of the colleges, and not the same two referred to in the previous paragraph, recognized tuition fee revenue at the time of registration. The other recognized tuition revenue on a cash basis at the time it was paid. All three colleges, however, accrued deferred revenues at the end of the year.

All other revenues at two of the colleges were recognized at the time that the services which resulted in the revenues were performed. The other college recognized the remainder of its revenues at the time that the cash was actually received.

The third issue was the basis used for reporting expenditures. For financial statement and annual reporting purposes, all three colleges used a functional basis. For internal reporting purposes, reports were generated and accounting was done on a program basis and on an object of expenditure basis. With regard to this issue, therefore, all three utilized the same basis for reporting expenditures.

The fourth issue dealt with the accounting of interdepartmental sales. Only one of the colleges recognized interdepartmental sales separately to ensure that double counting of revenue did not occur. At the other two colleges it was not felt that the amounts that were double counted were material enough to worry about. In each case, however, there was an awareness of the potential problem which existed.

Fifth, was the issue of accounting for cost recoveries. At all three colleges there seemed to be common practice. Revenue was recognized at the time an invoice for the cost recovery was issued. The off-setting account in such cases was the accounts receivable account. Should the cash have been collected in advance of the service being provided, one of the colleges would off-set the cash in the deferred revenue account. The other two accorded that treatment only if the receipt of cash and the provision of service spanned two fiscal years. Otherwise they recognized the revenue at the time that the cash was received.

With regard to tuition fee refunds, the sixth issue which was studied, all three colleges debited the tuition fee revenue account directly for any tuition fee refunds. This resulted in tuition fee revenue being shown on a net rather than a gross basis.

The final issue in this section dealt with whether or not sales are accounted for and reported on a net or gross basis. All three colleges reported sales on net rather than on a gross basis. All refunds were netted against gross sales prior to their inclusion in a report.

There were some common practices among the three colleges in the accounting for revenues and expenditures. However, more often than not, certain practices were common to two of the colleges but not to the third. It is noteworthy that the colleges with common practices were not always the same two.

5.32 Accounting for Ancillary Operations

All three colleges had some ancillary operations. The fund accounting literature was not definitive as to what constitutes an ancillary operation. As a result, it was possible that an operation may be classified as ancillary at one college, and that same operation may be part of general college operations at another college. In this study the only operation which was classified as ancillary at all three colleges was the bookstore operation.

Each college had an ancillary services fund. For reporting purposes, the revenues and expenditures of all ancillary operations were reported in that fund. It was noteworthy that at all colleges, any excess or deficiency of revenues over expenditures was transferred into the general operating fund the end of the year.

With regard to the accounting for assets, all three colleges were consistent in their treatment. In all cases, all capital assets were held in the college capital fund. They were assigned to the ancillary operations for their use, but the assets did not belong to the ancillary operation. They belonged to the college.

The inventories and other operating assets of an ancillary operation were shown on the Statement of Financial Position and were part of general college operations. For external reporting purposes, the assets that related to the ancillary operations were not accorded a separate accounting treatment as part of the ancillary operations. For internal purposes, on the other hand, a record of inventories and other assets was maintained. The treatment, however, was not unlike that accorded to any other profit centre.

Regarding liabilities that pertained to the ancillary operations, there was again consistency in the accounting treatment at the three colleges studied. No separate account for liabilities was maintained on behalf of an ancillary operation. In all three cases the liabilities were treated as part of the overall college liabilities.

Also, at the colleges there was no accounting for any surpluses generated by any of the ancillary operations. As was indicated earlier, any excess or deficiency of revenues over expenses was transferred "below the line" into the general operating fund at the end of the year.

For all intents and purposes the major accounting function for ancillary operations was in the accounting for revenues and expenditures. The ancillary services funds were accounted for separately and each ancillary operation was treated like a profit centre with profit objectives. No separate balance sheets were prepared for any ancillaries at any of the colleges. Therefore, for all intents and purposes, the ancillary operations were treated like profit centres, just as extension and continuing education departments were at some colleges.

5.33 Summary

The purpose of this chapter was to assess the descriptions of accounting, budgeting, and reporting practices and to compare and contrast the practices and procedures which were found at the three colleges that were studied. This process yielded many similarities in practice, but there was as well some diversity in practice. One of the major reasons for this diversity was that there was not a single source of accounting principles and procedures which could have been drawn upon. There were a number of sources, and depending on which source was used, this could result in a different procedure and a different treatment.

One significant source that was having an impact on the procedures which were used and was leading to more consistency in practice was the network of senior business officers and senior accounting officers. Common accounting, reporting and budgeting issues were discussed and common practices often resulted. Decisions from those two groups, however, were not binding and consequently some diversity still remained. According to the financial officials which were interviewed, however, more consistency in practice seemed to be evolving and much of that was attributed to those networks.

In general, more attention was being paid to accounting and reporting in the public sector and as a result, over the last number of years more principles in those areas have been developed. The work, however, has not yet been completed.

Chapter 6

IMPACT OF ACCOUNTING ON REPORTING AND BUDGETING

6.1 Introduction

The previous two chapters dealt with the findings of the research. Chapter 4 provided an in-depth description of the accounting, reporting and budgeting systems which were used in the three public colleges that were part of the study. In chapter 5, these descriptions were drawn upon so that the practices relating to those three systems could be compared and contrasted.

In this chapter, the emphasis is two-fold. First, the relationships among the systems at each college are described. That is, the relationships between the accounting, reporting and budgeting systems is provided. Second, for each college, the impact of the variability in accounting practices on budgeting and reporting is described.

6.2 College 'A'

6.2.1 The Relationship Between Accounting and Reporting

At College 'A' the relationship between accounting and reporting was quite clear. The accounting system served two functions for reporting. First, much of the information which was provided in reports, particularly much of the historical information, was extracted from the accounts and the accounting system. It was this information that provided a snapshot of the organization's financial activity at a particular time.

Second, not all of the information which was available from the accounting system was used in reports all of the time, or at the same time. As was discussed in chapter 4, there were a variety of users of the organization's financial information and their needs were different. The reporting system, therefore, was designed to be flexible enough to extract the information which was necessary and have it presented in an acceptable format in order that the needs of the users were met. For example, if a funding agency required information on staff costs only, the system could provide only that information.

It is evident from the foregoing discussion that the relationships between accounting and reporting at College 'A' existed and were of extreme importance. It is evident that a close integration of the systems existed.

6.2.2 The Relationship Between Accounting and Budgeting

Just as was seen in the previous section where there was a close relationship between accounting and reporting, also there was a close relationship between accounting and budgeting. Three points are worthy of discussion regarding that relationship.

First, it was the budgeting process which triggered the accounting process. No accounting for any unit or activity took place until there was a budget in place. Second, once a budget was in place and had been approved, it was this budget that provided the authorization to generate revenues and to expend funds against the approved activity. Third, it is the budget approval process that resulted in the assignment of revenue and expenditure codes. No codes were set up until an approved budget was in place. The accounting process, therefore, could commence only after the appropriate revenue and expenditure codes were established.

The above discussion dealt with the impact of budgeting on accounting. It should be noted that there was also an inverse relationship. One basic information source for budget development was historical information which was stored in the accounting system. Historical information was, of course, only one source of information for budgeting, but it was nonetheless, used.

The above discussion illustrates that there was a definite relationship between budgeting and accounting. That relationship was not one-way, but rather it was symbiotic.

6.2.3 The Relationship Between Budgeting and Reporting

There was also a direct relationship between the budgeting system and the reporting system at College 'A'. Three points in this relationship were noteworthy. First, in certain types of reports, the budgets were automatically included. An example of such reports was the ones that were prepared for ad hoc funding agencies. Typically, in those reports the program budgets and the actual financial results were presented for comparative purposes. Second, program budgets were also included on the internal expenditure and revenue reports that were prepared for various levels of management. Once again, the purpose of this information was for comparative purposes. Third, certain types of reports contained budget information only. Examples of such reports were the operating and capital budget plans which were prepared and submitted to the Department of Advanced Education just prior to the beginning of a fiscal year. Those plans covered the fiscal year that was upcoming.

As can be seen, the three financial systems at College 'A' were quite interrelated and interdependent. Each system supported the others and at the same time could be dependent upon the others.

6.3 College 'B'

6.3.1 The Relationship Between Accounting and Reporting

At College 'B' the accounting and reporting systems were fully integrated. They were both part of a same larger system. That system was designed to accept journal entries, process and summarize the information, and make it available for retrieval for reporting purposes. That same accounting system then generated the reports automatically. The system had some flexibility that allowed for variation in the reports which were produced in order that specific user needs could be better met.

6.3.2 The Relationship Between Accounting and Budgeting

There was also a close relationship between the accounting and budgeting systems, one that was perhaps more two-way than the relationship which was discussed in the previous section. Once the budgeting process had been completed and the budget had been approved, the resulting information was entered into the accounting system. From there it could be retrieved for reporting on an as needed basis. The budget was included as part of the accounting system.

The budgeting process, on the other hand, was more dependent on the accounting system. In the development of budgets, historical accounting information was often used to determine costs for programs, or to compare new budgets to actual expenditures for previous years' programs. As a result, the accounting system did serve as an information system to the budgeting process.

6.3.3 The Relationship Between Budgeting and Reporting

As has been stated in the two previous sections, College 'B' tended to view accounting, budgeting and reporting as part of one system. That system maintained the budget records, the accounting records, and as well, generated reports on an as needed basis. As such, all three were integrated, with the accounting system being the priority system.

In spite of that, the system generated budget information in the form of reports. Those reports contained budget information only, or they contained both budget information and historical cost information for comparative purposes. The former was true for the budget plans, both operating and capital, which were submitted to Alberta Advanced Education just prior to the beginning of a fiscal year. The latter was true for the internal expenditure and revenue reports which were prepared for various levels of internal management.

From the discussion regarding College 'B', it was evident that the budgeting, accounting and reporting systems were very closely related and fully integrated. In essence, one system combined the functions of the three smaller systems.

6.4 College 'C'

6.4.1 The Relationship Between Accounting and Reporting

At College 'C' the most basic of the three systems was the accounting system. It had a basic purpose of its own and that was to maintain a mechanism for management consulting. The accounting information, whether part of a report or whether it was used as basic data, was useful for advisory purposes, for making recommendations, and also for decision making.

The second purpose of accounting was to provide the information which was needed to fulfill the reporting requirements of the organization. The reporting system, therefore, synthesized and summarized the accounting information into an appropriate format for reports. The reporting system was dependent upon the accounting system for its raw data which was converted into appropriate information for reporting.

6.4.2 The Relationship Between Accounting and Budgeting

At College 'C' the budgeting process was essentially part of the planning process. It was the process that allowed the organization to reflect on events and accomplishments of the past and to look into the future and determine appropriate courses of action. The costing of those plans was the function of the budget process. The accounting system served as an important information source and an important term of reference against which budgets could be measured. In that sense, the relationship between budgeting and accounting was quite direct.

In the opposite direction, the accounting system was also dependent upon the budgeting system. One of the roles of accounting was to ensure that appropriate internal controls were in place. One of the benchmarks against which actual financial activities were gaged was the budget plan. Variances of actual expenditures or revenues from budgeted forecasts quickly served to provide indications of potential problem areas which may require attention.

It was felt at College 'C' that the relationship between accounting and budgeting was strong, but nonetheless, efforts were being made to integrate the two systems more closely so that the relationships and interdependencies could become even greater.

6.4.3 The Relationship Between Budgeting and Reporting

At College 'C' there was a relationship between the budgeting system and the reporting system. The reporting system relied on the budgeting system for certain information for reporting purposes. Both operating and capital budgets were reported annually to the internal college community as well as to external users such as the Department of Advanced Education. In addition, budget information was required for internal reporting which permitted a comparison of actual activity to budgeted activity.

Also, the budget system was dependent upon the reporting system. Budgeting, as a planning function, relied on the reporting system as a source of information. Current and prior year reports were used as a basis from which future years' activities could be planned. The two systems, although not totally integrated, were interdependent.

6.5 The Impact of Variability in Accounting Practices on Budgeting and Reporting

In chapter five a comparison of the accounting practices at the three colleges was provided. As became evident from the discussion in that chapter, there was some variability in the accounting practices among the three colleges. In this section the major differences in accounting practices and their impact on budgeting and reporting will be discussed.

A review of the annual reports of the three colleges revealed that the cost objectives used in the Statement of Changes in Fund Balances were common to all colleges. However, that commonality was in name only. For example, the term direct instruction could include counselling costs at one college, but those same costs were excluded from direct instruction at another college. Such variability had an impact on budgeting to the extent that when a budget was developed, different cost categorizations would be required. There was also an impact on reporting in that what appeared to be comparable information,was not comparable.

Another area of variability was in the recognition of gains and losses on investments. Two of the colleges accrued gains and losses at year end only, whereas the third accrued them monthly. This practice had an impact on both budgeting and reporting at the two colleges. The internal reports which were generated throughout a year did not show investment revenues until year end. Therefore, that would result in an understatement of revenues on the interim reports. As far as budgeting was concerned, the annual budget for an upcoming year was struck well in advance of the end of a current fiscal year. With the investment accrual not occurring until year end, the amount of investment income was not known and had to be estimated for budgeting purposes.

Two of the colleges did not accrue prepaid expenses until year end, and the third accrued them on a monthly basis. This variability also had an impact on budgeting and reporting. At the two colleges which did an annual accrual, the expenses were overstated in the period that the cash payment occurred, and in subsequent periods the expenses were understated. For budgeting, more estimating was required at the two colleges because a precise value for the prepaid expense asset was not known until year end.

There was also some variability in the way in which renovations were accounted for. The variability occurred around expensing versus the capitalization of the cost of the renovations. This difference could have a large impact on the financial reporting. If the renovations were expensed, this had the effect of increasing expenditures on the

Statement of Changes in Fund Balances. If the renovations were capitalized, this would have shown as an increase in the capital asset value on the Balance Sheet. This variability, however, did not appear to have an impact on the budgeting process.

Another area of variability occurred in the accounting for interdepartmental sales. One college netted out the interdepartmental sales from the total sales, whereas the other two did not. Interdepartmental sales do not result in an increase in cash or accounts receivable to the organization. Therefore, if they were not netted out, they resulted in an overstatement of revenues in the reports. In addition, if historical information was used for forecasting revenues, interdepartmental sales in material amounts would distort the revenue projections.

Varying designations of ancillary operations were also common among the institutions. What was designated as an ancillary operation at one college may be a profit centre in the operating fund of another college. This could have had an impact on reporting. If an activity was ancillary, then the results of its operation were rolled in the operating fund "below the revenue less expenditure line," whereas, if it was a profit centre, then the results of its operations were part of the operating fund "above the line." The impact on budgeting was not great since at all three colleges only revenues and expenditures were budgeted for the ancillary operation. This was, in effect, the same as budgeting for a profit centre.

The last area of variability that was worthy of discussion was the recognition of environmental assumptions. One college did not recognize the political and economic environment as being significant to the development of accounting procedures. It was, however, felt that the impact of this lack of recognition on the budgeting and reporting was insignificant.

As was evident from the above discussion, there was some variability in accounting practices and to differing degrees this variability affected budgeting and reporting

6.6 Summary

The relationships and interdependencies between the accounting, budgeting and reporting systems existed at all three colleges. The amount and type of interdependence was not common and did vary among the colleges. The variability in accounting practices also existed among the colleges. Its impact on budgeting and reporting existed, but the impact was not the same at all of the colleges.

Chapter 7

SUMMARY, CONCLUSIONS AND IMPLICATIONS

7.1 Introduction

This, the final chapter of this study, contains three major sections. The first section contains an overview of both the purpose of the study and the research methodology which was used in carrying out the study. The second part provides a summary of the findings which were derived from the study. The third section contains implications arising from the study that pertain to further research, theory development, and as well, administrative practice.

7.2 Overview of the Study

7.2.1 The Purpose of the Study

Education, like other public services which have been provided by governments or agents of government, has over the last thirty or more years come under closer public scrutiny. The recession in the Canadian economy in the nineteen eighties and the nineteen nineties and the rising deficits in the public sector, did not only cause an erosion of financial resources available to colleges, but they had also resulted in an expectation of greater accountability on the part of the colleges. Not only was the effectiveness of programs and services being questioned, but so was the efficiency and economy of the operations.

In order to assess the accountability, effectiveness and efficiency of an organization such as a college, it is necessary to rely heavily on the information provided by the college's budget administration system.

Three financial management systems were the focus of this study. They were the budgeting, the accounting, and the reporting systems. The study was designed to investigate the variability in accounting practices among three selected public colleges in Alberta and, further, to investigate the impact that any variability had on budgeting and the comparability of the reports which were generated by those colleges.

More specifically, the study addressed the following objectives relative to each of the public colleges which were studied:

1. to describe the structure of the accounting systems and the accounting procedures at each college;
2. to determine the basic postulates, objectives, principles, and standards that underlied the accounting practices;
3. to describe the budgeting and reporting systems at each college;
4. to compare and contrast the accounting practices which were used at each of the colleges; and
5. to determine and describe the relationships between the accounting system and the budgeting and reporting systems, in relation to the budgeting practices and the comparability of the reports.

Being able to address the main research problems and the accompanying objectives provided an excellent insight into the state of budget administration in the three colleges which were studied.

7.2.2 The Research Methodology

Three non-university post-secondary institutions in Alberta were the subjects of this study. As a result, the study was multi-case in nature and resulted in a description and a comparison of accounting practices and their impact on budgeting and reporting.

The initial contact at each of the colleges was the senior business officer. That contact in two instances was established through an intermediary. Through the senior business officer other finance personnel were identified and they served as information sources for the study. The main method of gathering information from these sources was the interview method. Two other data gathering methods were used, and they were observation of practice, and document review and analysis.

The data gathering process commenced with a review and analysis of pertinent documents from the colleges as well as some observation. The initial interviews tended to be unstructured and open-ended. During the course of a series of interviews, the interviews became more structured. This was particularly true after the development of the interview guide, through which some very specific information was sought. It should also be noted that the interview was used to clarify some of the data that were gathered through the two previously mentioned methods.

The data were analyzed at two stages in the data collection process. First, a large amount of concurrent analysis took place. Analysis at this stage served to narrow the study, to plan for subsequent meetings, and finally to enable development of the interview guide. After all of the data were collected some final analysis was necessary. Some of the categories in the interview guide had to be expanded, others had to be collapsed, and some were merged before a comparison could be made. The final analysis served that purpose well.

The final point that is noteworthy regarding the research design was the establishment of validity and reliability of the data. This study was done in accordance with the principles of qualitative research rather than the principles of the conventional paradigm. As such, four characteristics of the data were established. These four characteristics were credibility, transferability, dependability and neutrality. The techniques used to do this were consistent with the principles of qualitative inquiry.

The entire study employed a qualitative approach. This approach allowed for an in-depth investigation, and it also allowed for personal discussion between the college staff and the researcher that helped to maintain trust.

7.3 Summary of Findings

The development of accounting theory and principles in the twentieth century has focused on the commercial sector or the business enterprise. As a result, public sector accounting theory received little emphasis. In the last thirty years, however, as scrutiny over public sector activities has increased, and as the questions of accountability, effectiveness and efficiency began to be asked, so did questions of the state of planning, budgeting, accounting and reporting in the public sector. Post-secondary education was one of those public sector activities which was questioned.

One of the findings of this study was that there seemed to be variability in the budgeting practices among the three colleges which were studied. This was not unexpected for two reasons. First, budgeting procedures are not as well prescribed as are the accounting and reporting procedures. Second, in accordance with budgeting literature, institutions tend to mold their budgeting processes to meet their own unique needs. This is dependent on a number of factors including the maturity of the organization, the economic climate, and the organizational culture, to mention a few.

Regarding the accounting and reporting systems, there was some variability from institution to institution, but there was also a good deal of common practice. It was revealed by finance personnel at all three colleges that the amount of variability had indeed decreased in recent years. In this respect therefore, some of the criticism about the lack of budget administration standards in colleges was probably true, but this was due to the lack of emphasis on budget administration in the public sector. The situation has been improving. Essentially, four reasons were cited for this. First, the regular meetings of senior business officers and senior accounting officers provided an excellent forum to discuss and study accounting and reporting issues and problems. Second, the CICA Handbook was becoming a more important source of accounting and reporting standards, and this certainly lead to common interpretations and practices. Third, the annual audits which were performed by the Auditor General's office also resulted in more common practices. The auditors, being professional accountants, used the CICA Handbook for guidance. The fourth reason for the improving circumstances was the result of efforts of the Canadian Association of College and University Business Officers. The Handbook prepared by that Association served as an important source of standards at each of the three colleges.

In spite of the development of common practices there were some differences in practices that existed. The major differences and their impact on budgeting and reporting were discussed in the previous chapter. Among some of the differences that existed were the lack of a common terminology, the use of different bases of accounting, differing treatment of capital projects, and the lack of a consistent definition of ancillary enterprises. However, as was stated earlier, more consistent practices among the colleges were evolving.

7.4 Conclusion

Public sector budget administration has in recent years become an evolving field. With difficult economic times, this evolution will continue. More study and more research will be required. If such study is appropriately conducted, further theory development which will enhance public sector budget administration will also occur.

7.5 Implications For Further Research, Theory and Practice

Financial management in the nonprofit field is not a static discipline. With the increased scrutiny over operations and resulting expectations of accountability, effectiveness and efficiency, further research and theory development in financial accounting and reporting is inevitable. If the current economic conditions persist for any extended period of time, further research and theory development will certainly occur in budgeting and cost accounting as well. Practitioners will be searching for ways of maintaining effectiveness and accountability while they attempt to become more efficient.

There are five areas of accounting where further research is being carried out at present, or where further research is likely to occur. The first of these is depreciation accounting. Nonprofit organizations have typically not depreciated fixed assets but have held them at book value until they were declared surplus or lost. A question that is already being asked is, "How will the depreciation transaction be handled, and what will its impact be on the financial statements?" Will writing down of the asset value be a balance sheet adjustment only and not have an impact on operations, or will it appear on the statement of changes in fund balances, and, as a result, reduce any fund balances? Either approach could have a tremendous impact on the information that will be reported.

The impact of depreciation accounting is worthy of further discussion. Currently there is some suggestion that depreciation accounting in the nonprofit sector in the near future is inevitable. That possibility is being resisted among colleges for reasons relating to the impact that it will have on the financial statements. If the transaction is handled as a balance sheet transaction, then it could have positive effects for the colleges in that a comparison of the declining values of fixed values can be related to the capital grants provided by the Province. If the decline in asset value is greater than the level of the grants, which it is felt it would be, then there may be pressure for increasing the capital grants.

If, on the other hand, the initial depreciation transaction is applied to the statement of changes in fund balances, the ultimate effect on the balance sheet will be the same as indicated in the previous paragraph. However, the non-cash flow nature of depreciation can have a negative impact on the statement of changes in fund balance. It could create an artificial deficit and also create perceptions of fiscal mismanagement at the college level that would be inaccurate.

The above description addresses only two approaches of dealing with the issue of depreciation accounting. Other ways of addressing the problem are the subject of future research.

A second area which is currently under review is the recognition of a liability for vacations which have been earned but not taken at year end. Should the liability be disclosed in the footnotes or should it be shown as liability in the statements? Until now these compensated absences were not addressed in any way. Determining the methods which could be used and the impact of each is certainly the subject of further research, and this could lead to the development of a theory.

Some elaboration on the accounting for unused vacation is in order. First, the college year end in Alberta is June 30th. History has dictated that the vacation period in Alberta colleges is typically July and August. As a result, if the year end were changed to August 31st, then the figure representing the liability would be more realistic.

The second issue deals with the two suggested methods of dealing with the problem. The approach of footnote disclosure would certainly bring to light the existence of a possible liability, albeit overstated with the current fiscal year end arrangement. The second method requiring the balance sheet disclosure could result in an artificial reduction in fund balance, perhaps even the artificial creation of a deficit in fund balance. As a result, it too could create a perception of fiscal mismanagement and that would be inaccurate. The impact of these approaches and others requires further study, if the reported accounting information is to be useful information. The change appears to be on the horizon whether we like it or not.

The third issue is that of reporting the revenues and expenditures at gross rather than net. The recommendation for using the "Gross Measurement" approach has already come forth from the CICA. Its implementation has not fully occurred because further study of its implications is necessary.

The value of gross revenue and expenditure information as opposed to net information cannot be overestimated for both external and internal users. There is a sense, however, that there is a possibility of misperception. This demonstrates the need for further research at the behavioral level to allay those fears.

Fourth, is the issue of an appropriate bases of accounting to be used. For commercial sector accounting purposes, the CICA Handbook and the Income Tax Act are quite prescriptive as to the basis to be used. A prescription for the public sector would certainly have implications for both internal and external reporting. Further research into what those implications would be is certainly in order.

The most appropriate bases for accounting for colleges has long been a subject of discussion. Prescribing a particular basis could certainly result in consistency in practice. A common fear is what happens in the transition period. The researcher feels that this problem could be handled with appropriate discussion and disclosure. However, further research at the behavioral level would be invaluable.

The fifth area of concern is the comparability of the reports and the development of a common language for post-secondary educational institutions. Further research and development is required in this area. As was seen earlier, the lack of common language makes comparison difficult. Implementing a common language, on the other hand, cannot be done without appropriate consultation because of the impact that will be created on the past reports of some colleges and the resulting need to do massive restatements.

The basic foundation of a discipline is its language or nomenclature. The development of that language for budget administration in education is only beginning. If we strive for consistency, uniformity, and comparability, the development of that language is essential. There are, however, real sensitivities that must be addressed, part of which require breaking with tradition. Appropriate research can help us to overcome that burden.

The final area for further research deals with Hendriksen's third level of theory which is the behavioral level. What impact does accounting information have on the users of that information? This study focused on level one theory which was largely descriptive. More emphasis will need to be placed on the higher levels of theory if the financial management functions are to meet their goals. Perhaps studies in the five previously mentioned areas could have an element of level three theory development.

What about the practice of public sector accounting in the future? As was mentioned earlier, financial management is not a static field. Any changes in practice will have three implications for the managers. First, the changes will have to be accommodated in the financial management systems at each institution. Adaptions to systems may be necessary. Second, this accommodation will require training for the finance department personnel and also training for internal and external users. Old habits will have to be broken, and possible negative perceptions dispelled. Third, there may be positive benefits in that the resulting systems will generate superior quality information. To ensure that, however, quality research prior to the implementation of change will have to be conducted.

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APPENDIX I

INTERVIEW GUIDE

Interview Guide
Appendix I

1. Information Users

   The financial information which is generated by organizations can be of interest to a variety of users. Please identify the users of your organization's financial information.

2. Needs of Financial Information Users

   A fairly extensive list of possible user needs is found in the literature. The following is such a list. Please indicate which of these needs can be met by your organization's financial system.

   _____ A. To provide a record of business transactions.
   _____ B. To provide basic information for planning and decision making.
   _____ C. To provide a basis for financial control.
   _____ D. To provide information for reporting purposes.
   _____ E. To provide basic information for budgeting.
   _____ F. To provide information to resource providers about required resource levels.
   _____ G. To demonstrate appropriate accountability and stewardship.
   _____ H. To evaluate managerial and organizational performance.
   _____ I. To demonstrate the financial viability of the organization.
   _____ J. To demonstrate the maintenance of generational equity.
   _____ K. To provide information about the cost of services rendered.
   _____ L. To demonstrate the ability to meet obligations.
   _____ M. To demonstrate ability to continue to provide programs and/or services.
   _____ N. To evaluate the use of resources in the achievement of objectives.
   _____ O. Others - Explain.

3. The Assumptions Which Underlie the Accounting, Budgeting and Reporting Systems

   In developing a financial information system which includes the budgeting, accounting, and reporting subsystems, a number of postulates or assumptions about the organization and the environment within which it operates should be considered. Please indicate which postulates listed below would be appropriate to your organization.

_____ A. The organization is as an entity.
_____ B. The organization is as a composite of a number of entities.
_____ C. The organization will have a continuing existence.
_____ D. The social climate within which the organization operates has basic characteristics.
_____ E. The economic climate within which the organization operates has basic characteristics.
_____ F. The political climate within which the organization operates has basic characteristics.
_____ G. Others - Explain.

4. The Objectives of the Accounting, Budgeting, and Reporting Systems.

In accordance with the literature review, the financial information or budget administration system (accounting, budgeting and reporting) is designed to meet certain objectives. Please identify the objectives of those systems in your organization.

5. Accounting Objectives

The literature identifies numerous objectives that an accounting system should strive to meet. Indicate from the list below the objectives which your accounting system strives to meet. Include others not on the list.

_____ A. Relevance (Decision, Goal, Semantic)
_____ B. Verifiability
_____ C. Objectivity
_____ D. Consistency (Intra-organizational, Interorganizational)
_____ E. Comparability
_____ F. Materiality
_____ G. Disclosure (Full, Fair, Adequate)
_____ H. Double-entry system of accounts
_____ I. Conservatism
_____ J. Cost
_____ K Reliability
_____ L. Communicability (Freedom from bias, quantifiability, disclosure, simplicity, timeliness)
_____ M. Practicability
_____ O. Others - Explain.

6. Objectives of Reporting

The literature cites a number of objectives that a reporting system should attempt to meet. Indicate from the list below those objectives which your reporting system strives to meet.

____ A To demonstrate propriety and compliance.
____ B. To provide information about efforts, costs and accomplishments.
____ C. To show sources and uses of resources.
____ D. To provide information about changes in financial condition and obligations of the entity.
____ E. To provide information about restrictions placed on financial resources.
____ F. To facilitate evaluation.
____ G. To display the state of the finances.
____ H. To provide reliable information which is relevant to the needs of users.
____ I. To provide information which is clearly presented, understandable, timely and consistent.
____ J. To demonstrate accountability.
____ K To account for all sources, allocation, and uses of resources.
____ L. To provide information about the organization's financial condition.
____ M. To provide information that can be used to evaluate the ability of the organization to finance activities and meet obligations.
____ O. Others - Explain.

7. Fund Accounting

Public and nonprofit organizations use the fund accounting model rather than the commercial accounting model which is used in the profit-oriented sector. An organization using fund accounting has a choice of possible funds that it could establish. Identify from the list below the funds which comprise the accounting system in your organization.

____ A. General Fund
____ B. Special Revenue Fund
____ C. Capital Fund
____ D. Debt Service Fund
____ E. Special Assessment Fund
____ F. Enterprise Fund
____ G. Internal Service Fund
____ H. Current Operating Fund
____ I. Current Restricted Fund

_____ J. Endowment Fund
_____ K. Board-Designated Fund
_____ L. Plant Fund
_____ M. Custodial Fund
_____ N. Loan Fund
_____ O. Annuity and Life Income Fund
_____ P. Others - Explain.

8. Sources of Accounting and Reporting Standards
Standards are normally followed in determining the appropriate accounting treatment for transactions, and also for determining the nature and types of reports which are prepared. Please identify the sources from which the accounting and reporting standards that your organization uses were derived.

9. Accounting Standards
The literature provides various accounting standards which could be used by organizations. Please identify those accounting standards from the list below which your organization utilizes.
_____ A. Program accounting is used.
_____ B. Ordinary rules for accounting for inventories are used.
_____ C. Ordinary rules for prepayments are used.
_____ D. Appropriations are not considered expended costs.
_____ E. The matching principle for revenues and expenses is used.
_____ F. Revenues are classified by source.
_____ G. All assets are accounted for and reported.
_____ H. All liabilities are accounted for and reported.
_____ I. Others - Explain.

10. Reporting Standards
The literature addresses the issue of reporting standards for nonprofit organizations, and it also identifies a variety of standards which such organizations could use. Please indicate those standards from the list below which your organization uses.
_____ A. Reporting is done on a fund basis.
_____ B. Funds held in trust for other groups are not reported as assets of the reporting organization.
_____ C. Revenues accrued from trusts are reported as gifts.
_____ D. The Plant fund has four subgroups:
  ___ 1. funds expended for physical facilities,
  ___ 2. provisions for construction, renovation and acquisition,

___ 3. provisions for replacement, and
___ 4. funds for retirement of debt.

_____ E. Interfund transactions are reported after being approved by the Board.
_____ F. Unrestricted fund revenues are reported in the year in which they are earned.
_____ G. Restricted fund revenues are reported in the year that they are expended.
_____ H. Reporting is done on an accrual basis.
_____ I. Ancillary operations are reported separately from institutional operations.
_____ J. A comprehensive financial report is prepared annually.
_____ K. Financial statements and accompanying notes and schedules are clearly identified.
_____ L. Statements provide a fair presentation of financial conditions and operations.
_____ M. A comparison of current and prior period figures is provided.
_____ N. Bases used to calculate asset values and liability amounts are disclosed.
_____ O. Appropriate disclosure of audit requirements is presented.
_____ P. All liabilities are reported, including pension obligations, and the nature and terms of the liabilities.
_____ Q. All financial assets are reported.
_____ R. All encumbrances and contingencies are reported in the notes.
_____ S. Fixed assets are reported at cost or estimated value, and remaining service potential is reported.
_____ T. Revenues are reported by function and program.
_____ U. Expenditures are reported by function, program and object of expenditure.
_____ V. Gross revenues and expenditures are reported.
_____ W. Others - Explain.

11. Structure of the Accounting and Reporting Systems
The structure of the accounting and reporting systems can vary. Identify the structures which the accounting and reporting systems in your organization reflect.

_____ A. Functional structure,
(i.e.) instruction, administration, student support.
_____ B. Organizational structure

(i.e.) Department, Program.
____ C. Object of expenditure
(i.e.) salary, benefits, travel.

12. Bases of Accounting
The literature identifies four bases of accounting which can be used. Identify those which your organization uses and also identify where they are used.
____ A. Cash Basis
____ B. Accrual Basis
____ C. Modified Accrual Basis
____ D. Modified Cash Basis

13. Account Divisions
Accounting systems typically have five major account divisions. Please identify the account divisions which are present in each of the funds in your organization's accounting system.

14. Subsidiary Ledgers
Most accounting systems have a general ledger and various other subsidiary ledgers which relate to a control account in the general ledger. Please identify the subsidiary ledgers which your accounting system contains, and explain how these ledgers are used.

15. Accounting For Non-fixed, Tangible Assets
A. Does each fund have its own cash account in the accounting system?
B. How many separate bank accounts are held and what are they?
C. What policies does your organization have in place for dealing with idle cash?
D. What kinds of investment opportunities are open to your organization?
E. If your organization has investments, on what basis is the value of those investments calculated?
F. If your organization has investments, when and how are the gains and losses on those investments accounted for and reported?
G. What disclosure policies for investments does your organization have in place?
H. What pooling policies for investments does your organization have in place?

I. According to the accounting practices which your organization follows, are the assets separated into current and non-current categories?

J. How do you account for:
  (a) pledges receivable;
  (b) donations and bequests; and
  (c) donated services?

K. Explain how accounts receivables are accounted for under your current accounting practices?

L. Inventories:
  (a) What inventories are maintained for expendable items?
  (b) What cost assumptions are used for valuing inventory?
  (c) Is the valuation method disclosed in the footnotes?

M. Explain how you account for prepaid expenses.

16. Accounting For Fixed Assets

A. Which fund is used to account for fixed assets?

B. What classes of fixed assets exist at your organization?
  _____ land
  _____ buildings
  _____ furniture
  _____ equipment
  _____ library acquisitions
  _____ leasehold improvements
  _____ others, explain

C. When fixed assets are accounted for, three bases for valuation are commonly used. Identify the types of fixed assets for which each of the following basis is used:
  (a) capitalization at historical cost;
  (b) capitalization at market value; and
  (c) expensing at acquisition for accounting purposes, but maintaining an inventory of the items.

D. Does your organization practice any depreciation accounting? If so, what methods are used, and is there any disclosure of depreciation in the footnotes?

E. How does your organization account for major repairs?

F. Does your organization capitalize renovations? If so, when?

G. How does your organization account for capital lease agreements?

H. How does your organization account for library holdings and related costs such as cataloguing?

I. How does your organization account for the disposal of fixed assets?

17. Accounting For Intangible Assets
    A. How does your organization account for intangible assets such as copyright?
    B. How does your organization value intangible assets?

18. Accounting For Liabilities
    A. What liability accounts exist in your organization's general ledger?
        _____ (a) Accounts payable
        _____ (b) Long term debt
        _____ (c) Deferred revenue
        _____ (d) Others - Explain
    B. Explain the accounting practices which are followed to account for these liabilities.
    C. How does your organization account for and report compensated absences?
    D. How does your organization account for and report contractual obligations?
    E. How does your organization account for and report pension obligations?
    F. How does your organization account for encumbrances, and when is that accounting performed?
    G. What safeguards does your organization have in place to ensure that violations of restrictions to funds do not occur?

19. Accounting For Surpluses
    A. How many surplus accounts are accommodated by your organization's accounting system?
    B. How many types of reserves does your organization have?
    C. How does your organization account for interfund transfers?

20. Accounting For Revenues and Expenditures
    A. When does your organization recognize revenues and expenditures?
    B. On what basis does your organization account for expenditures - by function, program, or object of expenditure?
    C. According to the accounting principles used by your organization, is the matching principle applied to the accounting of revenues and expenditures?
    D. How does your organization account for interdepartmental sales?
    E. Explain how your organization accounts for cost recoveries.
    F. Does your organization account for sales on a gross or net basis?

G. How does your organization account for tuition fee remissions and refunds?
H. How does your organization account for bad debts?
I. How does your organization account for purchase returns?

21. Reporting System
A. Describe the reporting system which is used by your organization.
B. What policies does your organization have in place regarding disclosures on financial statements?
C. How does your organization report extraordinary items and prior period adjustments?
D. Explain how your organization reports activities which overlap fiscal years.

22. Types of Statements Which Are Prepared
Various types of financial statements can be prepared by nonprofit organizations. Identify the statements which are prepared by your organization.
_____ A. Balance Sheet
_____ B. Statement of Changes in Fund Balances
_____ C. Statement of Current Fund Expenditures
_____ D. Statement of Historical Changes in Fund Balances
_____ E. Statement of Operations
_____ F. Others - Explain.

23. Financial Statement Format
According to the literature there are a number of formats which can be used for the presentation of financial statements. Identify the format which is used by your organization.
_____ A. Columnar presentation
_____ B. Layered presentation
_____ C. Integrated presentation

24. Composition of the Annual Financial Statements
Identify the main sections contained in the annual financial statements.

25. Composition of the Annual Report
An annual report may contain various sections. Identify the sections that are contained in your organization's annual report.
_____ A. Introduction, including a letter of transmittal.
_____ B. A financial section complete with an auditors report.

_____ C. A statistical section.
_____ D. A mission statement.
_____ E. Acknowledgements.
_____ F. Footnotes.

26. Comprehensiveness of Reports

Lynn and Freeman discuss the "pyramid" concept of reporting. Within the pyramid are a number of types of reports. Identify from the list below, those reports and others, which your organization prepares.

_____ A. Consolidated reports.
_____ B. Combined reports.
_____ C. Separate reports for all entities.
_____ D. Others - Explain.

27. Auditor's Report

Lynn and Freeman identify four objectives which an auditor's report may meet. Identify the objectives which may be of concern to your organization from the list below, and identify any others that your organization may have.

_____ A. To demonstrate fair presentation and conformity with GAAP.
_____ B. To demonstrate compliance with legal requirements and restrictions.
_____ C. To evaluate the effectiveness of programs.
_____ D. To evaluate economy and efficiency of operations.
_____ E. Others - Explain.

28. Footnotes and Schedules

An integral part of financial statements are the footnotes and schedules. From the list below, indicate which footnotes are provided by your organization. Also, please identify any others.

_____ A. Summary of accounting policies.
_____ B. Contingent liabilities.
_____ C. Outstanding encumbrances.
_____ D. Legal and contractual obligations.
_____ E. Statistical tables.
_____ F. Performance of investments, showing both cost and market value.
_____ G. Detail of long-term debt.
_____ H. Detail of interfund borrowing.
_____ I. Analysis of functional expenses.
_____ J. Unit cost information based on credit hours, courses, student registration or full-time equivalencies.

_____ K. Others - Explain.

29. Internal Reports
Scheps and Davidson (1978) identified four types of financial reports which can be prepared for internal users. Identify the ones from the list below which your organization prepares and identify any others as well.
_____ A. Budget report to department heads.
_____ B. Internal report to management.
    _____ 1. balance sheet,
    _____ 2. comparison of actual results to budgets,
    _____ 3. statement of realized revenue,
    _____ 4. detailed statement of allocations and expenditures,
    _____ 5. operating report for ancillary enterprises,
    _____ 6. other specific reports on any organizational aspects.
_____ C. Interim financial statements.
_____ D. Annual report.
_____ E. Others - Explain.

30. Comparative Information
Identify what, if any, comparative information is provided by your organization in its financial reports.

31. Budget System
Describe the budgeting process which is used at your organization, including the steps followed within the process.

32. Budget Factors
In budgeting, various cost ingredients are considered. Identify the ones which are used by your organization.
_____ A. Personnel
_____ B. Facilities
_____ C. Equipment and material
_____ D. Program Inputs
_____ E. Client Inputs
_____ F. Others - Explain.

33. Cost Accounting and Budgeting
A. What cost accounting procedures does your organization have in place?
B. Does your organization have a job order costing system in place?

C. Does your organization allocate overhead to operating departments?
D. Does your organization use a unit cost system?

34. Accounting and Reporting for Ancillary Operations
A. Identify the ancillary enterprises which exist within your organization.
B. Does each ancillary enterprise have its own fund?
C. Explain how your organization accounts for the following aspects relating to the ancillary enterprise.
    1. Assets
    2. Liabilities
    3. Fund Balance
    4. Revenues
    5. Expenditures

APPENDIX II

CODING CATEGORIES

Coding Categories
Appendix II

As the data was collected, it was placed in coding categories for easy retrieval. The first code was a setting code. There were three of these, one for each college which was studied. Therefore, College 'A', College 'B', and College 'C' each represented a setting code.

The second broad coding category was based on a financial management discipline. There were three of these as well. They were accounting, reporting, and budgeting. During the early stages of the data collection process if data on internal control, for example, was collected, it was discarded in the interests of not broadening the study too much. There were also some subcodes. Within the accounting code, there was information gathered in three areas: financial accounting, managerial accounting, and cost accounting. Within the reporting code were two subcodes: reporting to internal users and reporting to external users.

In addition to the above two categories, there was a third which dealt largely with strategies. There were many codes within this category. They represented the major information areas that were researched with regard to each of the systems. Examples of accounting codes are basic assumptions, the objectives, the standards, and the specific procedures for accounting for specific types of transactions. These strategy codes were developed as part of the interview guide.

Similar codes were developed for reporting and, as well, for budgeting. They helped to organize the data and keep it organized.

VITA

VITA

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RELATED WORK EXPERIENCE:

Teacher	2 years
Instructor - Adult Education	11 years
Senior Manager - Program Administration	6 years
Senior Manager - Student Services	2 years
Senior Manager - Finance and Administration	4 years